

THE ARCHITECTURAL RECORD

CONTENTS

	PAGE
English House Architecture—Illustrated.....	81
RUSSELL STURGIS	
Quaint Timber Churches in Norway—Illustrated...	93
OLOF Z. CERVIN	
Old Houses in Jefferson County—Illustrated....	103
CHAS. DE KAY	
The First Congregational Church of Marietta, Ohio—	116
Illustrated.	
Mr. Alfred A. Pope's House at Farmington, Conn.—	122
Illustrated.	
Mr. H. S. Robbins' House at Lake Forest, Ill.—Illus.	130
Ornamental Metal Work and Wire Glass—Illus....	137
J. K. FREITAG	
Notes and Comments—Illustrated.....	146
Some Forms of Persian Art—Town Improvement—Improvement of Columbia, S. C.—Pamphlet Reports—Boston Bill Boards—Tuition in Architectural Drawing—Carnegie Library in Arkansas City.	

C. W. SWEET, Publisher R. W. REINHOLD, Business Mgr.
H. W. DESMOND, Editor H. D. CROLY, Associate Editor

Subscription (Yearly), \$3.00

Published Monthly

TWENTY
FIVE
CENTS

THE
ARCHITECTURAL RECORD CO.
NEW YORK

TWENTY
FIVE
CENTS

OFFICE OF PUBLICATION: Nos. 14 and 16 VESEY STREET, NEW YORK CITY.
WESTERN OFFICE: 511 MONADNOCK BLDG., CHICAGO, ILL.



CHVRCH GLASS AND DECORATING COMPANY
OF NEW YORK.



COPYRIGHT, 1906, BY CHURCH GLASS AND DECORATING CO. OF NEW YORK

SUGGESTION FOR AN
ORNAMENTAL DOMESTIC WINDOW

TWENTY-EIGHT WEST THIRTIETH STREET.

CHVRCH GLASS AND DECORATING COMPANY
OF NEW YORK.

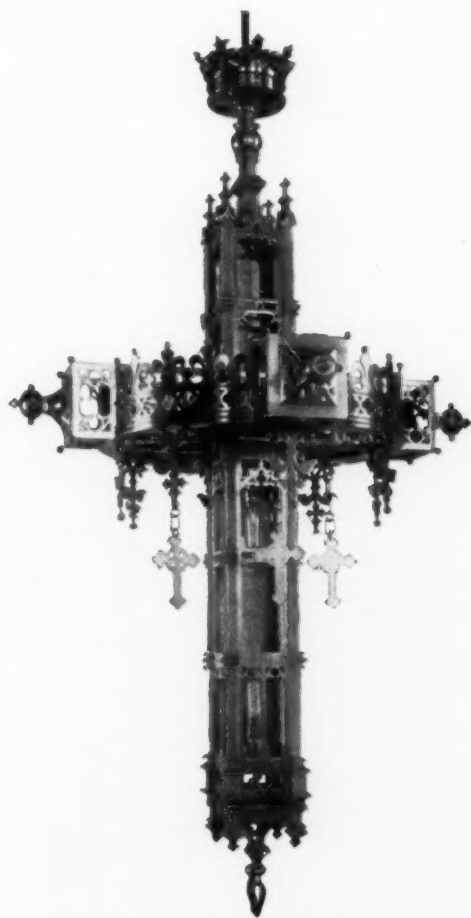


COPYRIGHT, 1906, BY CHURCH GLASS AND DECORATING CO. OF NEW YORK

MEMORIAL DOOR, ST. PAUL'S CHURCH, PATERSON, N. J.
DESIGNED AND FURNISHED BY THE
CHURCH GLASS AND DECORATING COMPANY OF NEW YORK

TWENTY-EIGHT WEST THIRTIETH STREET.

CHVRCH GLASS AND DECORATING COMPANY
OF NEW YORK.



COPYRIGHT, 1904, BY CHURCH GLASS AND DECORATING CO. OF NEW YORK

SANCTUARY LAMP
ALL SAINTS' CHURCH, LAKEWOOD, N. J.

TWENTY-EIGHT WEST THIRTIETH STREET.



COPYRIGHT, 1906, BY CHURCH GLASS AND DECORATING CO. OF NEW YORK

"TRUTH"

AN AMERICAN MOSAIC GLASS WINDOW
FROM THE STUDIOS OF THE
CHURCH GLASS AND DECORATING COMPANY OF NEW YORK

The Architectural Record

Vol. XX.

AUGUST, 1906.

No. 2.

English House Architecture

Since the new book by Mr. Field and Mr. Bunney on English house architecture has been in my hands, I have tried to find something which would provide similar information for France. How interesting it would be if the houses of the bourgeois, from the accession of Louis XIV. or a little before that time, to the breaking out of the French Revolution, were explained and illustrated in a book of even great size and cost! How much more useful it would be if something of that character could be provided in a book like this, costing the buyer fifteen dollars at retail! But the fact is, that such information is not within reach, except by the means of what we know as research—viz., the turning of the leaves of many volumes treating of many subjects. Such information must be found scattered through periodicals or in such books of miscellaneous contents as bear the names of Gailhabaud and Gaucherel; although even in those pages it is rather the stately and costly house front than the dwelling of the prosperous citizen which is illustrated. In Sauvageot's noble book, published in 1867, I find but one house which could be called *une maison bourgeoise*, and this is the house, rue du Châtelet No 3. It is earlier in date than the epoch which has engaged the attention of Messrs. Field and Bunney, and this one regrets, because it would be otherwise a good instance, when compared with the photographs of the English houses, of the way in which the French dealt, as they still

deal, with cut stone and delicate adjustments, as if material and fine labor cost nothing or very little.

The book of Verdier and Cattois is mediæval altogether. The numerous books on Paris do not touch on the citizen's private house: if the examples they give are ancient, they are stately; if modern, they surely do not include small private houses, because there are none such in Paris, except the fantastic country houses of the suburbs. And then, it is not nineteenth century villas that one is in search of.

Of German building, a little more is obtainable, and of this we shall treat on another occasion. Meantime it might be urged, of course, that the separate dwelling house of moderate size is a little more important, relatively, in German art and in English art, than it is in the history of France. We are talking now of a kind of building which has almost lost, in France, its special appellation. We cannot use the term *hôtel* for such a house, because even with the qualifying term—even in the form *petit hôtel*—it indicates a more stately residence than is now under consideration. The entirely exotic words villa and cottage may, indeed, be used, with an approximation to accuracy, but that is not speaking French. The word *maison*, when we are talking of city streets, means almost always to mean the house of many stories rented in many habitations.

A very few years ago, and we might have complained, with sufficient excuse,

Copyright, 1906, by "THE ARCHITECTURAL RECORD COMPANY." All rights reserved.

Entered May 22, 1902, as second-class matter, Post Office at New York, N. Y., Act of Congress of March 31, 1873.

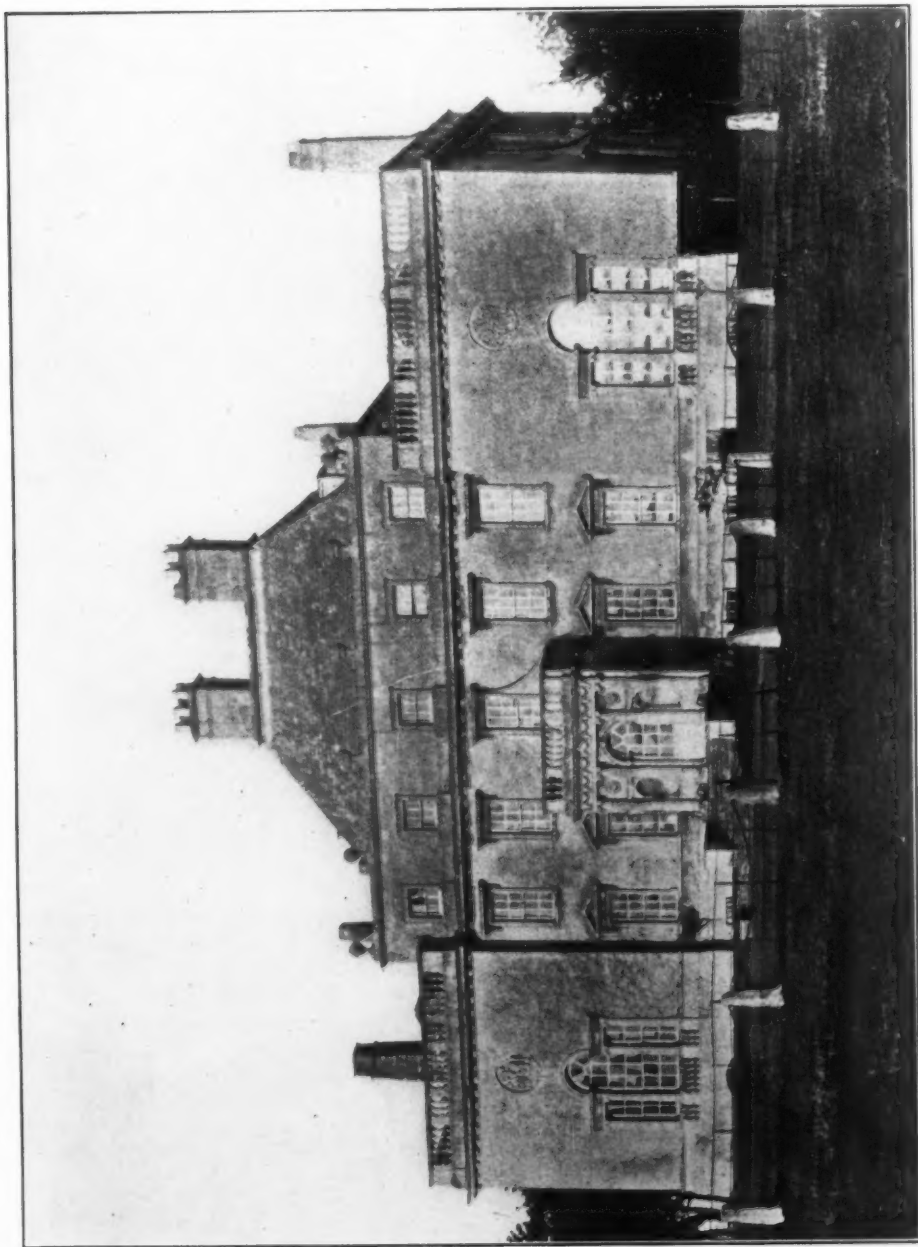


FIG. 1. CULVERTHORPE HALL.

This view "demonstrates that even an academically-designed building can carry a traditional roof without loss of stateliness."

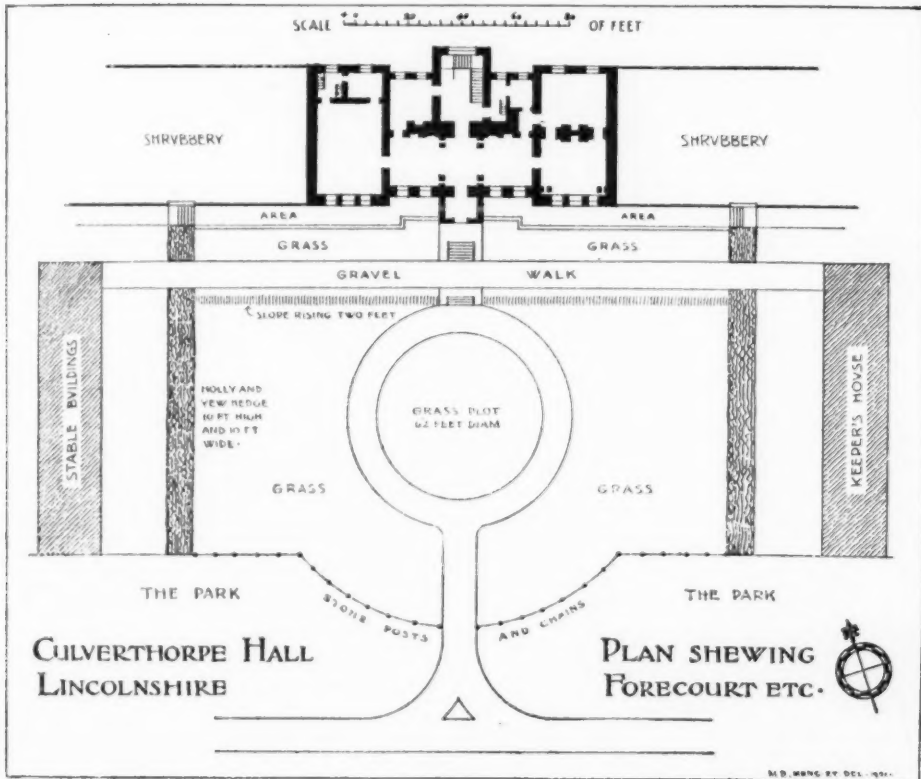


FIG. 2. PLAN, CULVERTHORPE HALL. (See Fig. 1.)

that French study of French architecture stopped with the Renaissance—with the beginning of the reign of Henry IV., or the year 1588, to begin again with the mid-nineteenth century. And of English study we may complain that it stopped with the latest manifestations of the Gothic spirit. Since that time there have been, indeed, a few books devoted to the post-Renaissance period in France, to the buildings of the era from 1600 to 1789; and in England the Elizabethan and the Jacobean periods have been studied. But so far as French books and French architecture are concerned, those works on the latter neo-classic styles are almost absolutely confined to the consideration of the palaces and public buildings of the towns, and the great country châteaux, with exception of such very splendid private houses as are epoch-making in their design and in their sculpture.

The above is a rather long prologue to a simple study of a new book; but it is really an interesting consideration that we know so little about the dwelling house of decent though not splendid character, during the years from the death of Queen Elizabeth or the close of the religious wars of France to the beginning of modern times, which one likes to fix at 1789 and the opening of the States-General. And, therefore, it is that such an adequate book whose name is given below,* is more welcome to some of us than would be one more study of the Italian *palazzi* or the French *châteaux*, or even the more simple and sociable English manor house.

Not that the volume before us ignores the gentleman's country house altogether. Fig. 1 shows Culverthorpe Hall,

*English Domestic Architecture of the XVII. and XVIII. Centuries, by Horace Field and Michael Bunney. London: George Bell & Sons, 1905.

in Lincolnshire, and Fig. 2 gives the plan of the house and grounds, all together and on a small scale. This, however, is accepted by the authors of the notice as being of a more grandiose type than that generally accepted for the book. And yet it is of a reserved and domestic design, this manor house which is forty feet by one hundred on the ground but only two stories high besides the attic, while the wings are of one practicable or presentable story, with perhaps some lofts about the skylight. Nor should we think too much of those one-story wings with their high roofs (arched up within in plaster and wood-work, as we know very well without

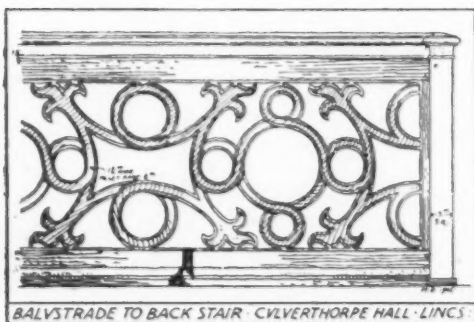


Fig. 3. Detail, Culverthorpe Hall (see Fig. 1).

being told). One of them holds the dining-room, we may assume, with pantry in the rear and a private staircase; the other contains the two drawing-rooms of the house, for all the middle part, the two-storied part, is taken up by entrance hall and main staircase. It is not a spacious house, nor at all an expensive one, and yet the authors, in their notice, dwell upon the stately character of the design.

The plates, as in the case of our Fig. 1, are photographic, but again there are plates in line. Thus, this very Culverthorpe Hall is shown in a line elevation (Pl. XLIX.) as well as in the photographic picture (Pl. XLVIII.) which is reproduced in our figure. This feature is repeated rather often in the book and its great value to the serious student of such things cannot be doubted. The wise student on his travels, buys photo-

graphs, takes them to the site of the building they represent, and writes his notes and memoranda upon the backs of his pictures. When he cannot do that, how important it is for him to see in squared and measured draughting, the forms whose effect is given by the photograph! The detail given in Fig. 3 helps the student to an idea of the interior design of the mansion. The description of the book is not complete without mention of the numerous line-drawings giving such details as this, and of the very interesting little half-tone pictures which accompany the text. There are seventy of these, and anyone looking for cottage architecture will turn to them first of all.

Fig. 4 shows another such mansion house, the Court at Holt, near Bradford-on-Avon, in Wiltshire, a house which is thought to be of 1715 or soon after. No plan of this is given, but we have the obvious condition of a house with a hall through the middle and a large room on either side of the entrance, with smaller rooms probably in the rear—for all the world like one of the wooden country houses of the years before the Civil War in the United States. At Beaufort, South Carolina, along the River James, in Virginia, in the prosperous small towns of New England, such houses were built, the only difference being that the western country had a superabundance of good timber and lumber, and of practiced carpenters, with masons and stone quarries far less in evidence. No one would go to such a house as this for refinement of detail, nor will it and its like be accepted by any architectural school as a type for the student; and yet if one wants to surprise the secret of tranquil dignity in houses of moderate cost, this is as good an example for him as another would be. Such other houses, relatively large and somewhat cared for in their design are the Manor House at Poulton, and Medford House, Mickleton in Gloucestershire; the Beaufort Dower House at Monmouth, and the Manor House at Tintinhull, Somerset. And there are two or three almshouses, large and rather comely buildings, and the Town Hall at Monmouth, with other

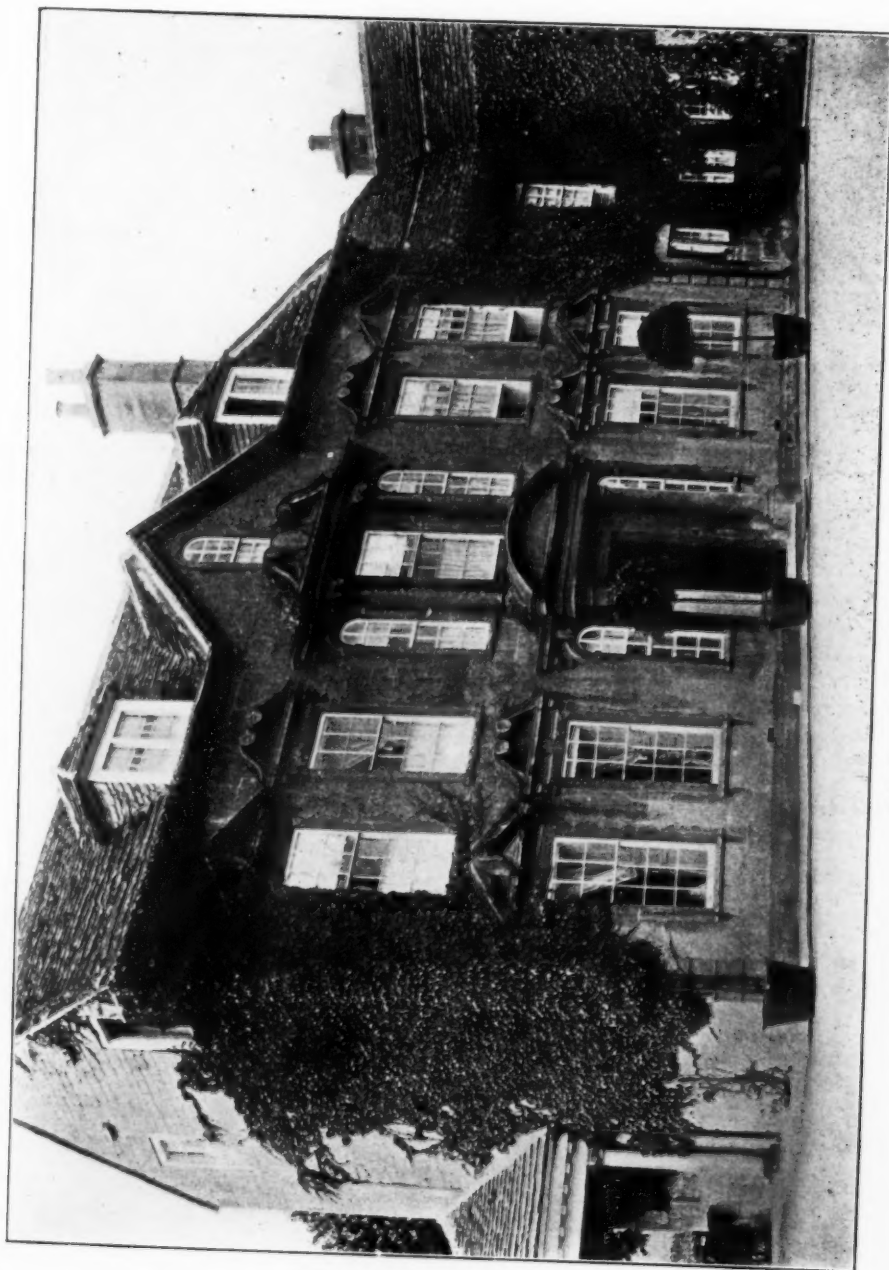


FIG. 4. THE COURT AT HOLT.
An "ornate house" with "unusual treatment of cornice."

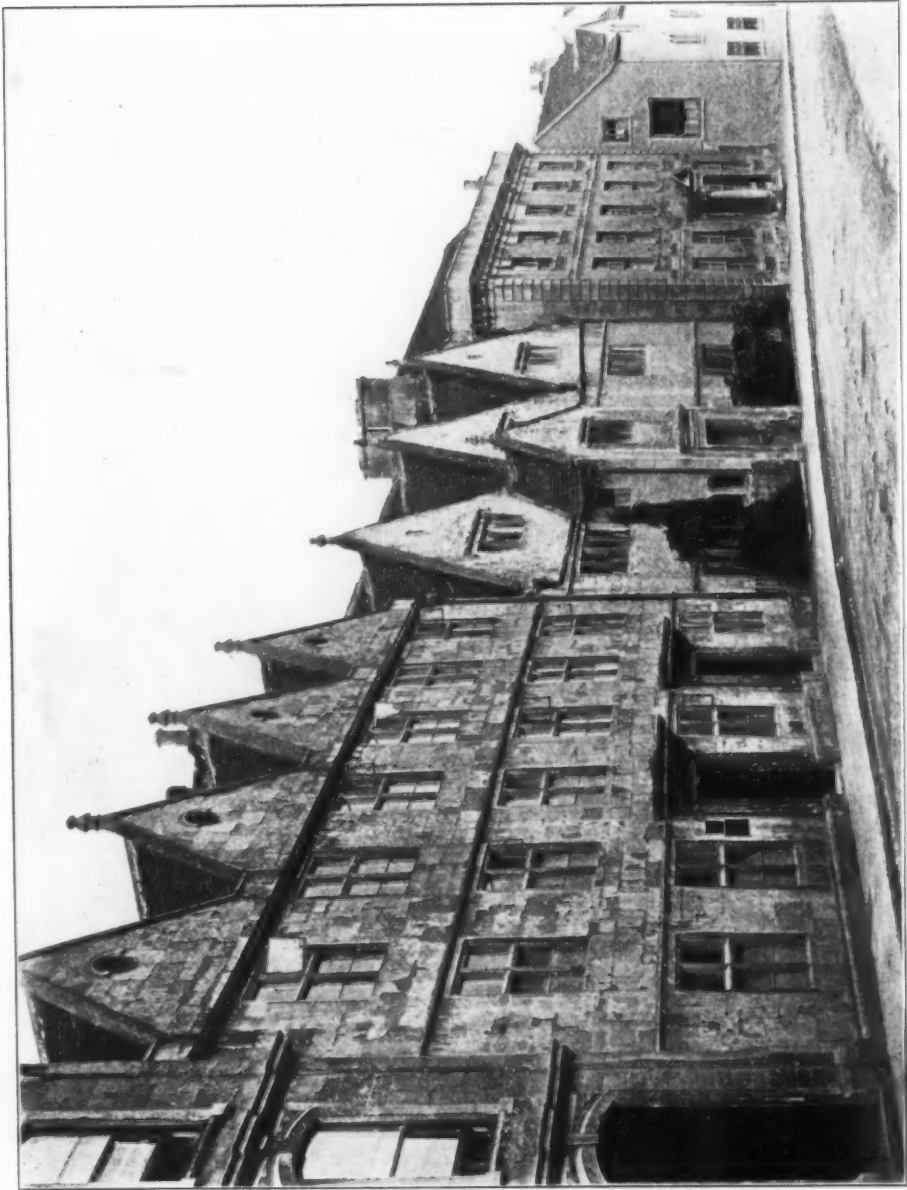


FIG. 5. STREET AT TETBURY.
"Particularly rich in architectural work that is full of traditional element."

specimens of municipal architecture of small pretense but of much charm.

The strength of this book, however, is in the study of simpler buildings still than these. Fig. 5 shows a street in Tetbury, Gloucestershire, and of this the authors say that it is interesting to see "the several steps of traditional evolution side by side" as here. But no one should suppose that the two houses which form the block nearest us, that

teenth century, probably of the time of William III., and was built while there was still much open space on either side of it; the large house spoken of above belongs to the beginning of the eighteenth century; and the house with level cornice beyond is of the Georgian period, not far from 1750.

Fig. 7 shows a row of almshouses of that characteristic English type which has each poor old pensioner housed com-

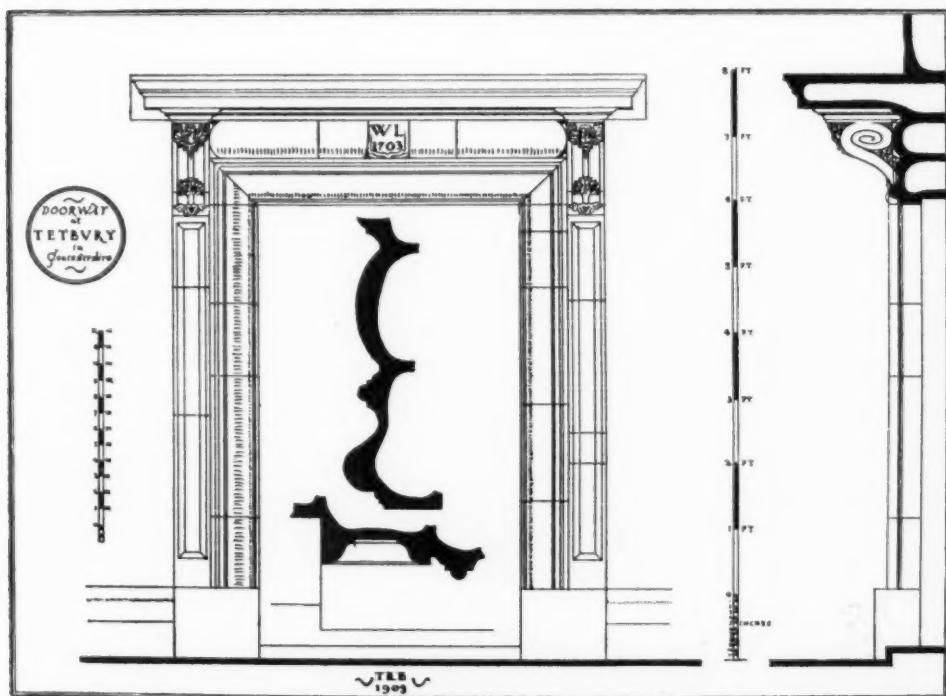


FIG. 6. DETAIL OF FIG. 5.

with the four gables, are mediæval or anything like it. The moulded string-courses above the windows are reminiscences of a time when the house fronts were built with overhangs, with projections, story beyond story as they ascend; and so the gables echo the thoughts of a more picturesque era than that which this building represents in reality. For here, Fig. 6, is the door-piece of the first house with its date, 1703, a date which is undoubtedly original. The sequence of styles, then, must be as follows: the low house with three gables is of the seven-

teenth century, probably of the time of William III., and was built while there was still much open space on either side of it; the large house spoken of above belongs to the beginning of the eighteenth century; and the house with level cornice beyond is of the Georgian period, not far from 1750.

Fig. 8 is a private house at Pendell, in Surrey. The associations with this house are remarkable, as the caption shows; and our authors' text may be cited further to the effect that this roof, with a deck and a steep lower pitch,



FIG. 9. DOORWAY, DATED 1695, AT CIRENCESTER, GLOSTERSHIRE.

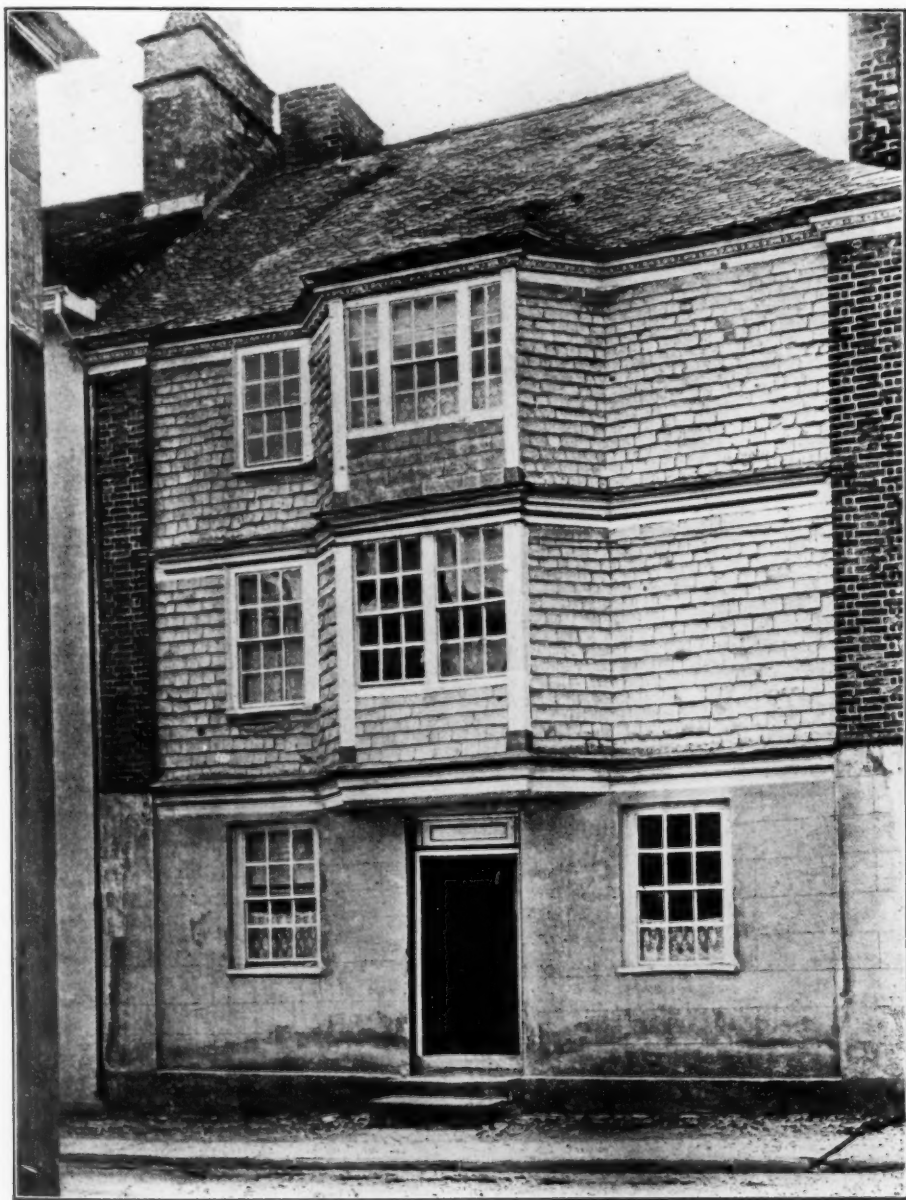


FIG. 10. HOUSE AT ASHBURTON.
Slating replaces weather-boarding.



FIG. 11. CISTERN OF CAST LEAD, POUNDISFORD PARK, SOMERSETSHIRE.



Fig. 7. Almshouse at Northleach.
"Gables, a feature more noticeable in the stone districts."

altogether so like our American "French roofs," had been in use for many years (before 1636!) in the timber buildings of the south of England.

Fig. 9 gives one of those interesting doorways in which the designer has tried to give to his very broad lintel a simple adornment, expressive of its meaning as a stone-resisting cross-breakage. The severity of the style would not, it was thought, allow of rounding up his lintel in the middle, so that the stone would be in reality thicker where it needed to be thicker. But the device used might be thought sufficiently classical in feeling.

We must not transfer too much of this book to our own pages, but there are one or two outlying specimens to which it seems desirable to call attention. I feel myself much drawn, as if to an ancestral home of my own, to the house at Ashburton, Devonshire, shown in Fig. 10. Is not that little house the very prototype, except for its brick pilasters, of our American shingle-covered frame house? These, however, are not shingles, as they seem. The authors call attention to the fact that "these small Cornish slates are very suitable for wall-hanging." Here, then, is a slated house, indeed, walls as

well as roof, covered with that incombustible material. And is not the projecting pier which I have called a brick pilaster, on either side of the front, an excellent thing for the design—separating the front from the house adjoining?

All we have heard or read or thought for ourselves about the simplicity and homelike character of English architecture, is found here fully set forth. As English cathedrals are, so is English domestic architecture as shown in this volume—never too grandiose for its purpose, always erring, if it errs, on the side of shamefacedness, seeking (and getting) effect in little and by inexpensive means.

And this record may close with a piece of elaborate adornment, Fig. 11, carried out in a material and by a method which can never be very costly—a cistern for water in Poundisford Park, Somersetshire. This is of cast lead-work; but it is certain that at another time and in another place work equally elaborate would have been wrought with the hammer. Repoussé work in thin lead is a delightful art, too much neglected in recent times.

Russell Sturgis.

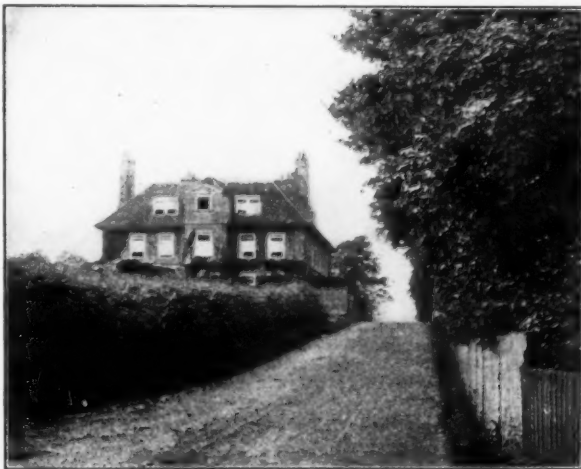


Fig. 8. Pendell in Surrey.
Inigo Jones in 1836 used here "the common Sussex roof form."



ROMAN CARVED ORNAMENT FROM POMPEII.

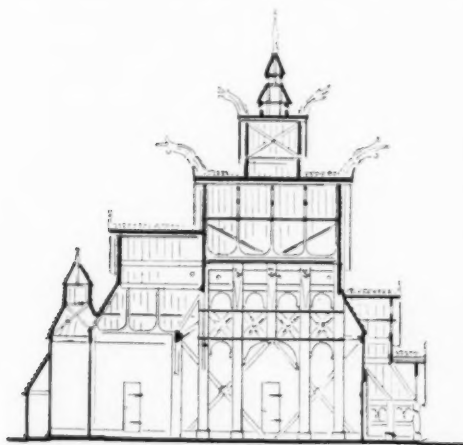
✧ Quaint Timber Churches in Norway

A rear guard of twenty-four, a dwindling, mutilated remnant of a once mighty host! So much is now still left to witness of the vigorous building activity of the Catholic Church in Norway. At one time there were no less than seven hundred of these mystical peculiarly sombre churches that breathe the atmosphere of a Greig sonata.

At first glance the thought comes, how Oriental, how Chinese! But there is no Asiatic element here, not one. It is simply the Romanesque basilica type, the historic church of Roman Catholicism which has found in the Scandinavian peninsula a very striking individual expression. The fundamental thought—the ground plan and the main lines of the exterior are just such as they were

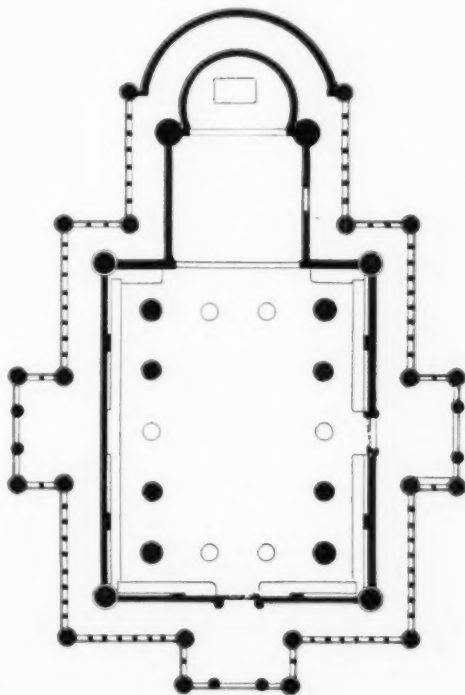
indeed native and they call it "Svalgang" or cool passage. It has a three-fold purpose, and is no doubt an adaptation from a similar feature used in domestic building.

It has served as a vestibule, a storage place for skis, overshoes, wraps, etc., for a far travelling public in a sparsely settled country. As all of these old churches



LONGITUDINAL SECTION STAVE CHURCH OF GOL

Longitudinal Section, Stave Church of Gol.



PLAN OF STAVE CHURCH OF GOL

Plan of the Stave Church of Gol.

developed by the builders in Italy first and later in the other countries of Europe. At the east end is the round apse closing the chancel. In the main body is seen the nave rising with its clerestory above the side aisles just as distinct as in any South European stone church.

But what is that peculiar, part open passage all around the church? That is

are of wood, this lower roof was added partly as a protection to the main building against dampness. And how well has it served its purpose, for some date as far back as the 10th and 11th centuries.

These two are the practical reasons. There is also an aesthetic one. The lower roof repeats the roof lines of the aisles and nave and carries them down

as though the whole edifice were firmly planted on the rock.

But whence came the roof rider and the dragon heads? These two are also native, and how effective! If the lowest roof connects the structure unmistakably with the ground these upper additions emphasize as strongly as possible the vertical, the upward tendency that is

If these Northern builders had an eye to the beautiful outlines of their buildings they were no less attentive to the small details. Could anything be more exquisite, varied, and well balanced than the decoration of their portals? Among these are two richly carved door posts, being all that is now left of the former churches to which they once gave entrance. With what keen delight these same workers in wood also decorated the church chairs is still to be seen in some



Carved Church Chair, from Hedemarken.
(Early Medieval.)



Carved Chair, Blaker Caard in Lom.
(Late Medieval.)

characteristic of Mediæval building. The people who built these churches also built viking boats, or had done so before they were converted. Now they decorated their church gables after the manner of the prows of their ships, in which they traveled over many seas, both known and unknown. It was this people who discovered America four hundred years before Columbus did.

examples now carefully preserved in museums. The earliest of these ornamentations show Keltish influence. Later came Anglo-Saxon, and last, the Norman—the emigrant Northmen of France, thus reacting back on their Mother-country.

Nothing could be more solid than the erection of these churches. Large round posts support the corners and others are

placed at important points. The space between is filled with upright tongued planks or staves and these give the name to their construction, for they are known as "Stave-kirke." This vertical manner of building is used only in churches.



Carved Doorway, Church of Tuft, Landver.
Late Norman Influence.

Dwellings, storehouses and stables were built with horizontal timbers.

All "Stave" churches date from 1000 to 1500 A. D., from the introduction of Christianity to the Reformation. They were built for the Catholic ritual and

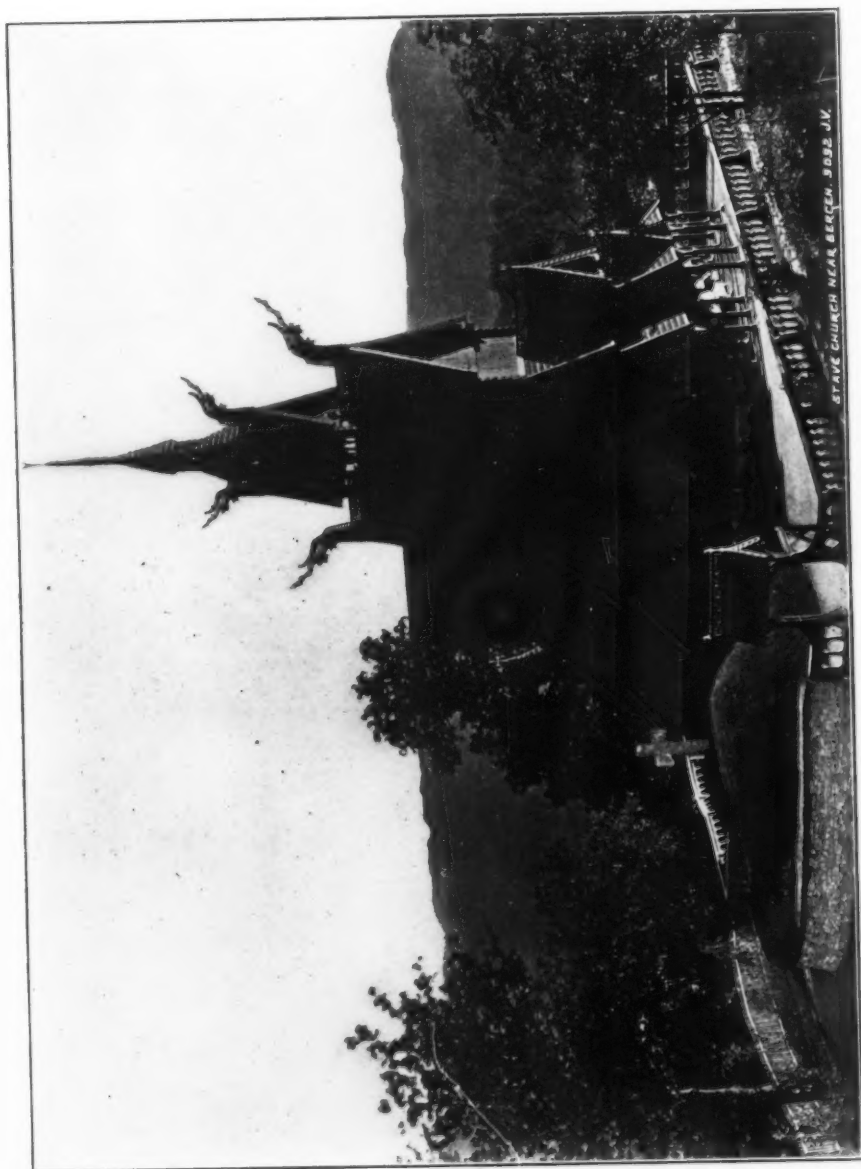
have but little provision for lighting. Small holes in the clerestory permit a meagre light to filter down. Services were always conducted to the flickering light of candles. The windows that show are modern, incongruous and unfortunate alterations.

The oldest still standing church is said to be one in Urnaes in Sogn. It has no "Svalgang" and the turret is a poor substitute for the graceful roof rider of the other churches. But in one respect it is more interesting than any of the others. In the lower right hand corner some carving is seen, which shows better on the larger photograph. There is good reason for accepting the



Carved Doorway, Church of Flau, Hallingdal.
Earlier Norman Influence.

claim that these carved pieces were taken from the heathen temple that had occupied the very site of the present church. It is not the only instance of a victorious religion thus signaling its supremacy.

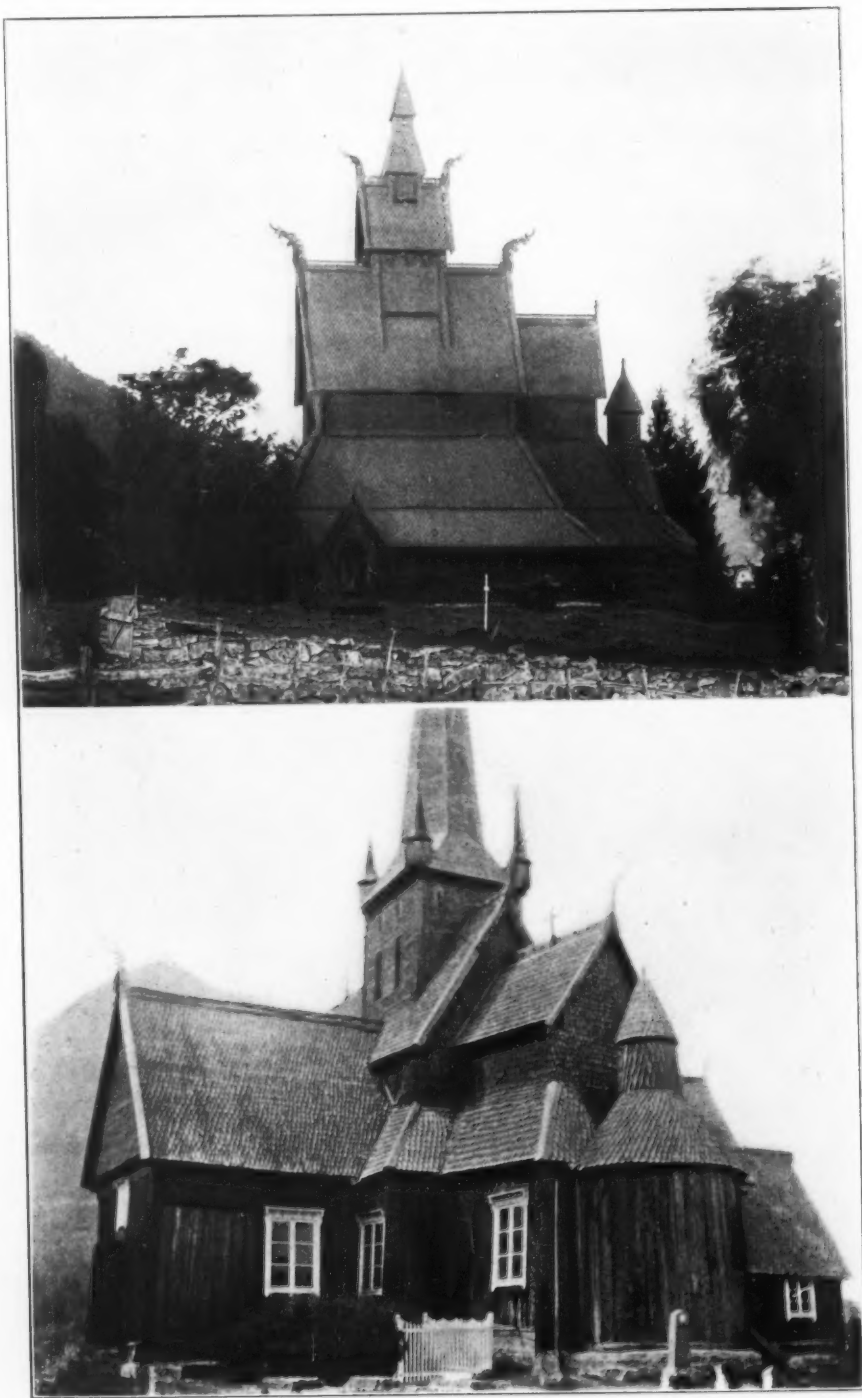


CHURCH OF FORTUN, SOGN.

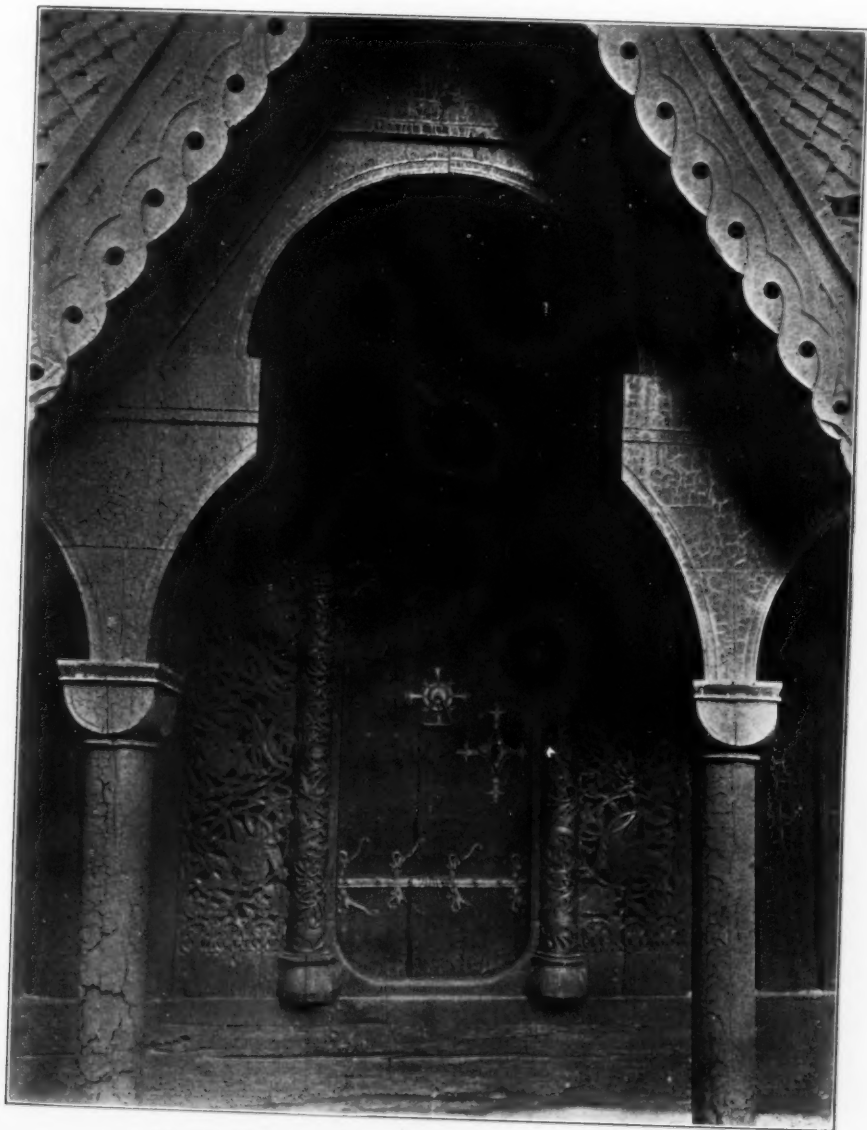
STAVE CHURCH NEAR BERGEN, 1882. J.V.



CHURCH OF BORGHUND IN GAERDAL near Bergen



1. CHURCH OF HOPPERSTAD IN SOGN.
2. CHURCH AT LOUIS.



SOUTH ENTRANCE: CHURCH OF HÖPPERSTAD, SOGN.

1074



WEST VIEW: CHURCH OF GOL, HALLINGDAL.
(Now in the Bygdøe collection.)



SOUTHEAST VIEW: CHURCH OF HITTERDAL, TELEMARKEN.

The least restored is the church of Borgund in Laerdal. It has no windows, and the very roof shingles have a quaint unkempt air of Northern independence. This church dates from the 11th century, but the passage was added in the 12th. Thus it stands today a frame church, soon 1000 years old, a monument to the thorough builders who made it durable and to their taste, for its beauty is also an element to which it owes its conservation.

The other churches have been much altered and restored. Thus the church of Lom consists of two, pieced together, and it is further disfigured with a spire and windows.

The church of Hopperstad in Sogn also dates from the 11th century, but was restored in the 60's and looks rather new. It has a beautiful portal, is well proportioned, and shows influence of Norman work.

The church of Fortun in Sogn has been moved to Fantoft, near Bergen, and much restored, but not always correctly. The "Svalgang," with its too open post-work has lost much of the character of stability and protection.

The church of Hitterdal in Telemarken is restless and grotesque, but a notable and bold piece in spite of the very incongruous windows. It was built in the 12th century, and restored in the 50's.

The church of Gol is the one mostly seen by tourists, for it has been removed to Bygdø, near Christiania, where there is an open air museum of old Norwegian buildings. It, too, has been much restored, at the expense of King Oscar II.

This rear guard of an interesting

army is dwindling, although a wide-awake appreciation is doing much to arrest decay and prevent destruction. Thus a fine tribute is paid to an artistic race, to the people who did so well with the material at hand, the illimitable forests of the mountain side.

And well they might. For search as one will there are no stave churches outside of Norway. There are, it is true, a few remains in Sweden, just enough to show that both of these people built along the same lines. But whereas, in Sweden timber building gave way early to masonry, in Norway the traditions of wood construction have been carried down to our day. It is true that after the 14th century they forgot, or neglected, to build artistic churches. But they did build dwellings and storehouses that are models of good construction well designed. These are erected in no known historic style, and yet they too have style—in that fine sense when we say an author has style—their own style.

The interest in building had passed from the religious sphere to the domestic. Nor was Norway alone in this. The architectural history of all Europe shows the same course. An intense all absorbing interest in everything religious excluded nearly all other matters through all the Middle Ages. This force expended itself and with the Renaissance the church lost much of its hold on the people. Then men began to build for their own glory and comforts palaces and châteaux and the more humble habitations of man. The Norwegians repeated in wood the history of Southern Europe written in stone.

Olof Z. Cerven.

Old Houses in Jefferson County

Just about one hundred years ago the lands to the East of Lake Ontario and South of the St. Lawrence in the State of New York were discovered as very desirable owing to their climate, the variety of their woodlands, the water power offered by the Black River and its tributaries, and their nearness to markets—by land to Albany and the head waters of the Hudson, by water to the Great Lakes and down the St. Lawrence to the sea. It was a period of land speculation. Settlers came in from Pennsylvania, and the New England States as well as New York, and, what was most singular, these lands attracted as investors a good many Frenchmen whom the Napoleonic wars had disturbed and who sought to cast an anchor to windward by following the advice of agents to those looking for idyllic homes in the young Republic of the West.

France began under Louis XVI. to admire the United States under the pressure of her struggle with England, and felt a just pride in having given efficient aid in detaching a colony with infinite possibilities of expansion from the hereditary enemy across the Channel. The French way of establishing a Republic was a sad disappointment, but the very chaos introduced by the reign of terror and the wars of Napoleon drove men of ancient lineage as well as the newer nobility of Napoleon's creation to seek a haven of rest. The story of French men and women used to luxury who came over to settle in these wild woods has never been told, persons accustomed to city life whose heads were full of dreams engendered by Jean Jacques Rousseau and the poets, expecting to live stern lives of contemplation and worship of Nature in the primeval forest, yet as unfitted as children to cope with the brutal facts of existence in the wilds.

Niagara and the noble red men fired their imagination. The magnificent lakes and water courses, wild game and wilder forests were there, and a country

ready to respond to hardy backwoodsmen and shrewd pioneers. But they were neither. And so they did not, for the most part, bear the privations and isolation long. Only a tough remnant stayed, and it is to them we owe some of the most interesting old houses in this northerly county of the Empire State.

Jefferson was famous for its natural forests of sugar maple, not to speak of walnut, hickory, hemlock and pine, but the maple was a boon since it supplied the settlers with sugar and vinegar. The apple, cherry and plum knew no blight and the wild grape furnished hardy stocks on which to graft the vines of Europe. Owing to Lake Ontario and the prevalent westerly winds the climate is mild in winter and cool in summer. Abundant snow and a steady cold in winter retard the spring and prevent a nipping of fruits and vegetation by sudden changes from warmth to cold, while the snow mantle promotes transportation in winter by sleigh and sledge. A hundred years ago it proved an ideal soil for wheat.

As the century went on, Jefferson County filled up with settlers. It experienced the thrill of war when the United States broke with England—clumsily and at the most inopportune moment; and then battles took place on land and the lakes which unfortunately sowed the seeds of distrust and dislike between us and the Canadians, a war, as we regard it now, so tardily resolved upon and so irresolutely carried out, that we wonder why it was ever begun; but, having once commenced, what was the matter with the people that they failed to prosecute it with the energy they undoubtedly possessed. Chaos in Europe reflected chaos in America.

Strange to say, Jefferson County, which continued to advance in population and wealth during this war, began to languish about 1817. The reasons given by one of her most eminent citizens, M. James Le Ray de Chaumont, are curious. One was the acquisition of

Louisiana, which turned the tide of emigration to the Southwest. Another was the invention of the steamboat, which brought other wheat and fruit producing sections into competition. The "Ontario" about 1816 was the first on the lake. A third reason was the low prices at which one Congress after another sold the public lands, and a fourth was the opening of the Erie Canal, which put a large part of Jefferson at a disadvantage in the costs of getting products to mar-

and in his opening address M. de Chaumont laid stress on the necessity for some form of meeting for the country folk into which neither political nor religious differences should intrude. Talleyrand, when in the United States, said that we were a people of thirty religions and one white sauce. M. de Chaumont was no master of epigram; he indulged in no form of the national French habit of caustic or witty speech; but he laid his finger on a serious defect of our early

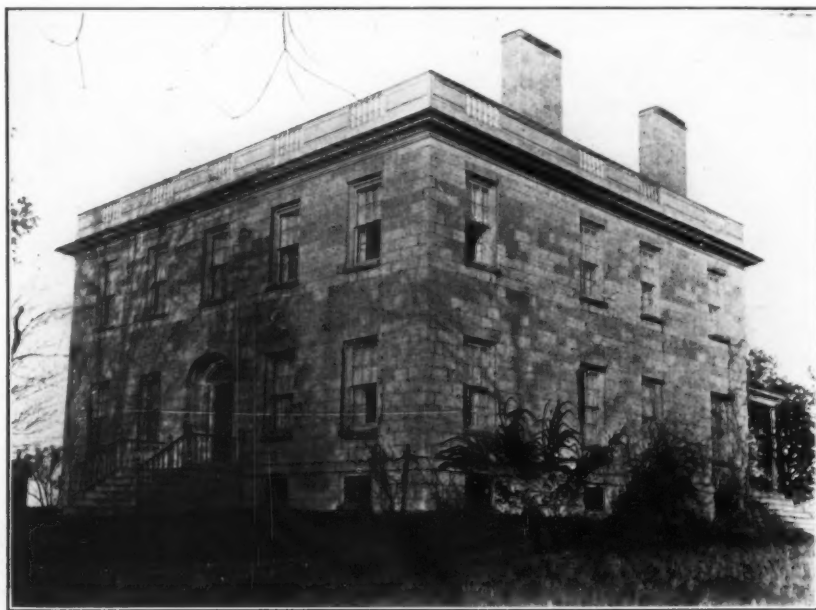


FIG. 1. RESIDENCE OF MAJOR GENERAL JACOB BROWN.
Brownville, N. Y.

ket. A fifth was the loss of Canadian markets and the practical closing of the St. Lawrence as a natural outlet for American goods by the British. The last count was the worst, the general and steady fall of the price of wheat in the markets of the world.

Nevertheless, Jefferson County could boast that alone in New York State it supported a flourishing Agricultural Society, founded in 1817. Its President, M. de Chaumont, became the President of the New York State Agricultural Society founded in Albany in 1832. Its motto was "The Plough is of no Party,"

communities, the disintegrating effect of many religious sects and of several political parties. It was his dream that country neighbors who were kept apart by sectarian differences and political rancors might come together on the neutral ground of agriculture and learn to know and respect each other under the compulsion of a common interest that affected their well-being.

This excellent man imported French vines and did what he could to introduce the use of light wines as a corrective to whisky and hard cider; he imported stud horses and fine bulls; encouraged the

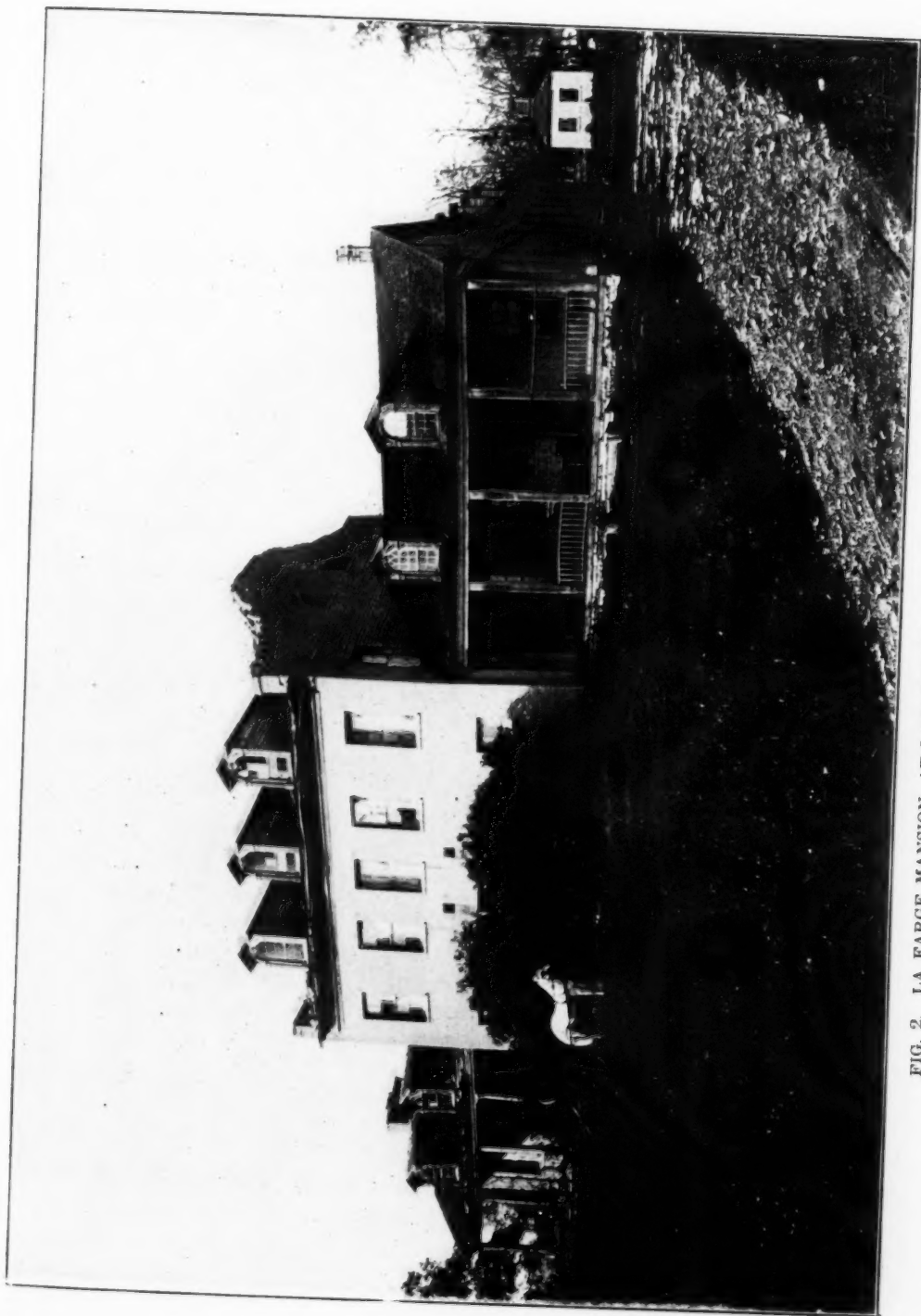


FIG. 2. LA FARGE MANSION, AT LAFARGEVILLE, NEAR THE THOUSAND ISLANDS.

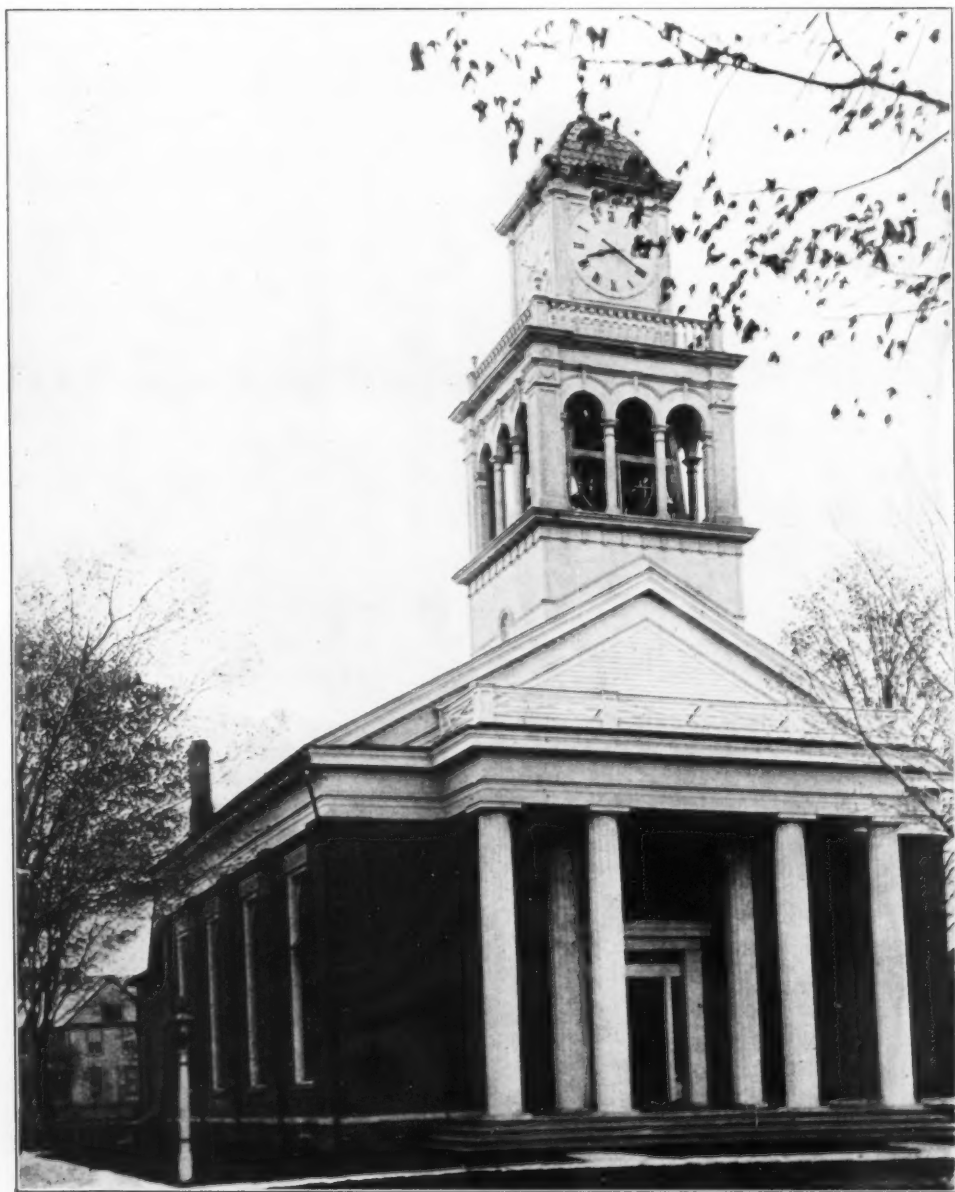


FIG. 3. THE OLD CHURCH AT SACKETT'S HARBOR, NEW YORK.

breeding of sheep and sought to widen the resources of farmers by advocating the planting of hemp for cordage and mulberry trees for the production of raw silk. Toward the end of his life he returned to France. He is known as Count Le Ray de Chaumont, and his name remains in Chaumont Bay, north of Sacketts Harbor, and at Chaumont and at Le Rayville. With all his simplicity of ad-

the old stone residences in Jefferson County is the house of Major-General Jacob Brown, school-teacher, land agent and general of militia, shown in the illustration (Fig. 1). The windows have no drip-stones, but each has a structural stone lintel. The profile of the eaves is fine though severe. The whole house in its square solidity has an imposing effect. Brownville has its name from him.



FIG. 4. THE RESIDENCE OF GENERAL SACKETT (1803).
Sackett's Harbor, N. Y.

dress and bonhomie, he was a type of the grand seigneur; so that old people like to recount what they heard from their parents regarding the coach-and-four of the "Count," the entertainments at his chief residence and the style that was set when he entertained Presidents and high officials of the country and State at a country seat which combined some of the stateliness of foreign residences, nurseries for fruit trees and vines, hot-houses and model dairy.

One of the simplest and sturdiest of

In its ruins the old La Farge mansion (Fig. 2), with its central body of stone and brick, tall dormers and lower additions of wood, its quaint panes and porches formed by recessing the fronts of the wings, suggests the South. One might be looking at the remains of some old rambling plantation house on the Mississippi. And, in fact, Monsieur Jean La Farge, father of the eminent painter, John La Farge, did come from New Orleans. But he was originally a merchant of Havre, in France, one of the firm of

Russell and La Farge. He came to Jefferson County to look after some lands he had acquired; later on he moved to New York City, where he became a notable figure in the annals of real estate, the old La Farge House in New York getting its name from him. But long after he left Jefferson County he bought and sold lands there. M. Le Farge was an agent of Louis Philippe, who invested funds in the United States and had confidential relations with many other

on the seaboard, and in 1840 removed it to Fordham, where it became the nucleus for St. John's, which of late years has lost a good deal of its former character of a school for priests and blossomed into a college.

The La Farge estate was part of an enormous holding in this region, including 600,000 acres belonging to Peter Chassanis, of Paris, and William Constable, as far back as 1792. Part of it was sold to Charles Michael de Wolfe, of



FIG. 5. THE HOUSE OF DR. GUTHRIE.

Sackett's Harbor, N. Y.

Frenchmen of title whom the varying fortunes of European politics brought this way.

One would like to think that John La Farge the painter had been born in this delightful old rambling manse, which stands, or stood very recently, seven or eight miles south of the Thousand Islands. But he was born in New York after his father moved thither. The La Farge mansion was for some years the seminary of St. Vincent de Paul, a training school for Catholic priests, established there by Bishop Dubois; but Bishop Hughes found it more practicable

Antwerp, who organized the Antwerp Company. In 1805 the Duke of Vincenza, no other than the famous Louis Augustin de Caulincourt, of Napoleon's day, became interested. In 1818 the Marquis de Cubières, of Paris, was owner of a part, through his marriage to Madame Olive, widow of one of the original settlers, and in the same year Joseph Bonaparte, erstwhile King of Spain, bought a big tract from James Le Ray de Chaumont, using the title of Count de Survilliers. In 1825 Count Real, former Chief of Police under Napoleon, General Grouchy, who came

too late at Waterloo, and General Desfurneaux, became land owners.

Lafargeville lies seven miles south of Clayton-on-the-St.-Lawrence. Originally Log Mills, it was named Lafargeville in 1823, and by 1850 had 50 houses, three churches and an academy.

Ten or twelve miles west of Watertown, the county seat of Jefferson County, on the Black River, and on Black River Bay, Lake Ontario, is the small settlement of Sackett's Harbor. It was

its manufactures, and now a widespread city of broad, shady streets and comfortable homes.

Sackett's Harbor, this lake port for Watertown, at the mouth of the Black River, was long a post for army and navy men. There was a fort there and in its early days before 1812 sometimes an apology for a garrison. Indeed, there are signs that the French laid out a fortification there on regular Vauban lines a century earlier, some time during the



FIG. 6. THE PEUGNET HOUSE, BUILT IN 1808.

Cape Vincent, on the St. Lawrence River.

founded in 1802 by a New York lawyer, Augustus Sackett. There are Madison Barracks and Fort Tompkins Square, which recalls a battle between the British-Canadians and our levies during the War of 1812. Here the frigates *Superior* and *Madison* were built by Henry Eckford, the one in eighty days, the other in forty-five. In May, 1813, the British, under Prevost, attacked the little place unsuccessfully, having to retire with great loss; twice the arrival of the British fleet off the harbor seemed to foreshadow the fall of the post and the taking of Watertown, already noted for

existence of the French occupation of Canada.

The old church of Sackett's Harbor (Fig. 3) has the look of those erected under English architectural influences in the twenties and thirties. Observe the agreeable effect of the square belfry with its triple arched opening on each face and the unusually elaborate feature of four clock faces on the square cupola above. Note also the two columns to the rear under the four-columned porch.

Sackett's Harbor was a busy place during the war of 1812, when Henry Eckford established his shipyards and

turned out sloops and frigates with marvellous rapidity to meet the small but formidable navy gathered on the Canadian side. He had to take green wood right from the forest; because, of course, Congress had fiddled and faddled and began the war without preparation. For many decades the New Orleans and Chippewa, two of the unfinished, never-launched vessels built by Mr. Eckford, stood covered over on the stocks just as they were left after the naval victories

in the list of old houses illustrated here (Fig. 5).

Perhaps the oldest and certainly one of the most interesting houses of stone in Jefferson County, remarkable also from a historical point of view, is the Peugnet House, built of stone in 1808 on the banks of the St. Lawrence at Cape Vincent (Fig. 6). It is said to have been prepared by Count de Chaumont for the use of Napoleon, when the latter was debating whether he should accept the sug-



FIG. 7. A HOUSE BUILT IN 1816 BY COMMODORE ELISHA CAMP, Sackett's Harbor, N. Y. (Now the Mason House.)

on the lakes had removed the stress of danger.

Army and navy officers naturally made Sackett's Harbor their home after retiring from the service. The fine old frame house of General Sackett, shown in the illustration (Fig. 4), was built about 1803 by the man who gave his name to the place and is still owned by his descendants. Doctor Samuel Guthrie, to whom the discovery of chloroform has been attributed, and the invention of the percussion cap for rifles, lived in a simple old square brick house at Sackett's Harbor, which is worthy to be included

gestions of certain friends and sail for America. All the wood in the house is said to have been wrought in France and sent across the ocean. An underground passage is said to exist, leading to the river, so that if the house were surrounded a person could escape. The ball room was used for drilling soldiers during the English war of 1812-1814. It used to be known as the Cup and Saucer House. Here assembled many of the French people who fled before the varying fortunes of war in Europe, hoping to end their days among the lovely scenery of the Thousand Islands and Lake Ontario.



DETAIL OF STOOP—HOUSE OF COMMODORE ELISHA CAMP,
Sackett's Harbor, N. Y.

They brought with them the fashions and habits of Paris, and used to meet for social purposes in a style scarcely known outside of New York and Philadelphia. But very few of these interesting exiles were of strong enough fibre to stand the loneliness of that beautiful country very long. One by one they drifted back to comparative civilization. But while they stayed they made a brave fight to keep up the traditions.

It was owned by Hyacinthe Peugnet, who fled from France after Napoleon's

light and the corresponding large arched window above the front door in the second story; also the broad crowsteps of the gable walls and the fine architectural treatment of the side wall with its entrance and flanking windows. The paper on the walls was imported from Turkey in 1820. The place is now known as the Mason House.

Another interesting house built in 1816 is at Chaumont, a village on one of the properties of Le Ray de Chaumont (Fig. 8. It is of dressed stone, and was



FIG. 8. THE LE RAY DE CHAUMONT HOUSE.
(Built in 1816.)

Chaumont, N. Y.

retirement to Elba. He opened a school, which was attended by boys from Canada and Louisiana as well as the neighborhood. Here General Beauregard, of the Confederate Army, went to school.

One of the oldest places in Sackett's Harbor is the house built for himself by Commodore Elisha Camp in 1816 (Fig. 7). The brick of which it is constructed was brought from England and landed at Albany, whence it was hauled one hundred and fifty miles in wagons to Sackett's Harbor. Note the pleasing arch over the door, with its deeply recessed fan-

originally a severe, square structure without porches; those seen in the illustration are later additions. Another more elaborate house was built in the same year at Lerayville (Fig. 9), the porch supported by four tall unfluted columns with Ionic capitals, the main house as well as the two recessed small wings crowned by balustrades and the porch continued round the entire front. James Le Ray de Chaumont, next to Pierre Chassanis, seems to have been one of the earlier landowners. As early as 1798 he bought 10,000 acres in

Cortland township and he owned shares in De Wolfe's Antwerp Company. The town of Le Ray, which held its first recorded meeting in 1807, is named from him, as well as Chaumont.

Still another stone house built by the Count de Chaumont at Chaumont in 1818 is remarkable for its doorway and an air of rude solidity which must have been impressive in those days of log cabins and frame dwellings. A kitchen annex has been added to give more space within (Fig. 10).

lared portico in its degeneracy. Owing to the darkness of the second story front rooms by the heavy wooden columns and porch roof the columns were made very tall and slender, and they support a pediment which really represents the garret. Strange as this style of architecture may seem to those who reason out the purpose of a porch and the suitability of such colonnades to our climate and mode of life, it can be found in many parts of the country. It seems at one time to



FIG. 9. THE LE RAY DE CHAUMONT HOUSE.
(Built in 1816.)

Le Rayville, N. Y.

Some of these old houses have been reproduced on the walls of the Roswell Flower Memorial Library at Watertown. They are disappearing as wealth increases and ideas of comfort as well as fashions in architecture change. It was a happy inspiration that gave them an abiding-place within a building likely to endure for many generations to come.

We may close the series with a view of Commodore Woolsey's house at Sackett's Harbor (Fig. 11), a frame dwelling curious in its architecture since it shows a type of the old classical pil-

have denoted a certain social rank in the possessor. It certainly was a luxury and, like many luxuries, often an inconvenient one.

In our country houses which have survived a century are rightly considered remarkable. They are being swept away through the demand for more larger and more comfortable dwellings, and those which are not so much exposed to destruction by fire. Taste has also turned against them save in cases where they are uncommonly picturesque or have historical associations connected with them.



FIG. 10. A STONE HOUSE AT CHAUMONT, NEW YORK.
(Built by Le Ray in 1820.)

It is therefore with the hope that they will prove interesting to the readers of The Architectural Record that these few

notes and these few old houses in Jefferson County are offered them.

Charles de Kay.



FIG. 11. COMMODORE WOOLSEY'S HOUSE, SACKETT'S HARBOR, N. Y.



THE FIRST CONGREGATIONAL CHURCH, MARIETTA, OHIO.

The new church (1901).

E. C. & G. C. Gardner, Architects.

The First Congregational Church of Marietta, Ohio

In 1787, Congress passed a bill granting to the Ohio Land Company all of the territory northwest of the Ohio River which did not belong to Great Britain, France or Spain. It is doubtful if Congress worried itself greatly as to the exact extent or bounds of the land which it gave over, but it was specific upon one point,—a point which deter-

Naturally one of the first acts was the establishment of a church. In 1801 the First Congregational Society was organized, and meetings were held in a block house and hall until the completion of the first church, which is illustrated here.

This church was begun in 1807. It was used for services in 1808, and com-



THE FIRST CONGREGATIONAL CHURCH, MARIETTA, OHIO.
The old church (1809).

mined the destiny of the country,—no slaves were allowed, and the future of six of the greatest states of the Union was settled for all time.

The leaders of the Ohio Company were Manasseh Cutler and Rufus Putnam, both of Massachusetts; and in the spring of 1788, Putnam brought the first emigrants down the Ohio River to a point where the Muskingum River joins it, and there began the city of Marietta.

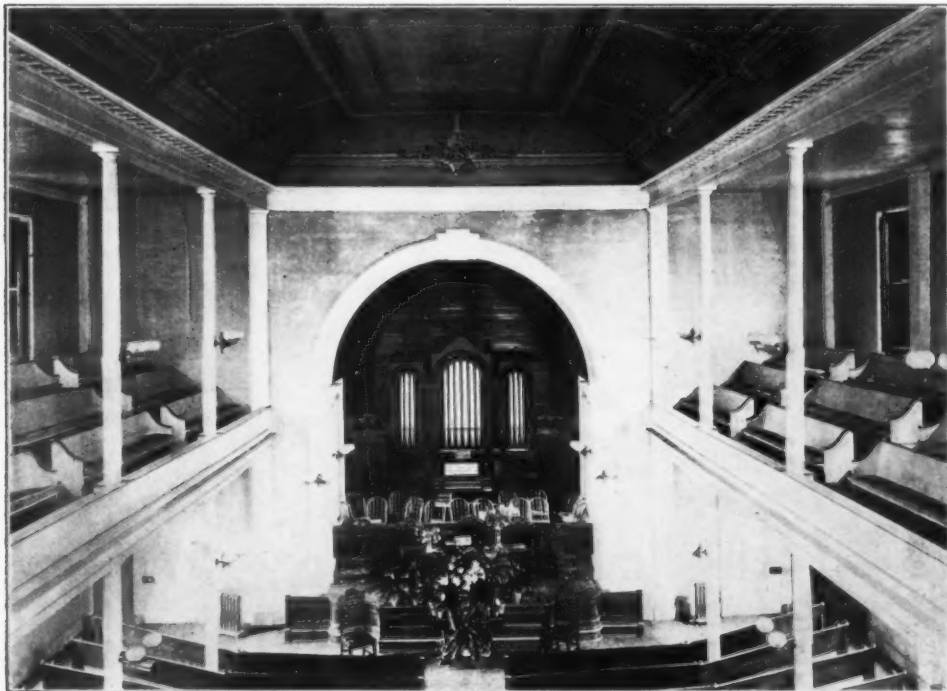
pleted in 1809. It is not known who designed the church. Gen. Putnam is credited with it, so is the Rev. Samuel Robbins. Gen. Putnam was the leading man on the building committee, and had had much experience in building. In the French and Indian wars and in the Revolution especially, he was constantly called upon to design and erect structures, his best known achievement being probably the fortifying of Dorchester

Heights, a brilliant piece of engineering which forced Lord Howe's evacuation of Boston.

It would seem quite possible that in Gen. Putnam's later years the designing of this church would be a most natural thing. It was evidently a work in which he took great interest, and well-to-do men of his type were prone to do such

Bay, but foreign to the inland towns of New England.

The entire front, with its twin towers, either shows a laudable desire to excel twofold what had been left at home, or what seems to me more probable is due to the influence of New Orleans, Natchez or St. Louis, for Marietta then had but one main highway to the world, and the



THE FIRST CONGREGATIONAL CHURCH, MARIETTA, OHIO.

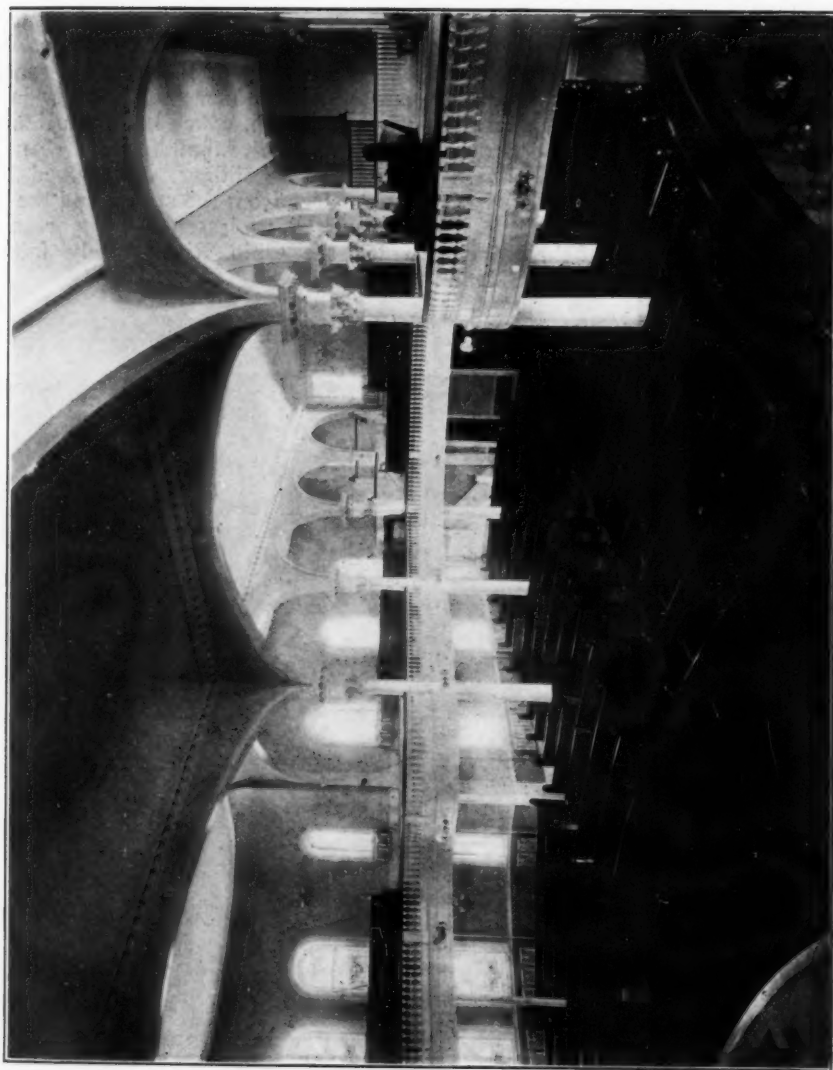
Interior of the old church as built in 1809.

work in the first years of the last century.

Whoever designed it, the church was on its completion the finest west of the Alleghenies. Morse, in his geography (ed. 1811), speaks of it as "an elegant structure." It was not beautiful perhaps, but it was interesting. The interior, both in plan, proportion and detail, is straight from Massachusetts, and rural Massachusetts at that. The bell-fries of the twin towers are of the type as unmistakably associated with the salt breezes of Massachusetts or Buzzards

most of her commerce was to the south and west.

There was a large French element there. The town, in fact, was named after Marie Antoinette, and at the first meeting of the directors of the new city, the following resolution was passed: "That the city at the confluence of the Ohio and Muskingum Rivers be called Marietta; that the directors write to his excellency, the French ambassador, informing him of the motives for naming the city, and request his opinion whether it will be advisable to present her



THE FIRST CONGREGATIONAL CHURCH, MARIETTA, OHIO.
Interior of the new church, 1905. E. C. & G. C. Gardner, Architects.

majesty of France a public square." Thus did the town receive its name.

The cost of this first church was \$7,349.03½, and Joshua Shipman was the master builder.

The additions and changes of 1901 were made to meet the following conditions: 1, Provision for a large organ and chorus choir; 2, a fifty per cent. increase of seating capacity; 3, various rooms for pastor's study, choir and ante-rooms and the like; 4, a more elaborate exterior and interior; and 5, the carrying out of the above conditions with a minimum of change in the original structure and at a moderate expense.

The original framework of the church was untouched, except that the rear

wall and one bent of the side walls were removed to make room for the short transepts, and the towers taken down to the belfry decks.

Immediately after the burning of the remodeled church, in 1905, it was decided to rebuild in brick and to make little change in the exterior design. In the interior, however, a single order was substituted for the nave columns, in place of the slender double order in the original church, which had been retained in the remodeled building.

The new building was moved back several feet from the street, and the first floor raised to lessen the opportunities which the Ohio River rarely fails to seize.



THE FIRST CONGREGATIONAL CHURCH, MARIETTA, OHIO.

Showing the interior as it was altered in 1901.

E. C. & G. C. Gardner, Architects.

Mr. Alfred A. Pope's House

AT FARMINGTON, CONN.

McKIM, MEAD & WHITE, Architects

Mr. H. S. Robbins' House

AT LAKE FOREST, ILL.

JOHN G. ROGERS, Architect



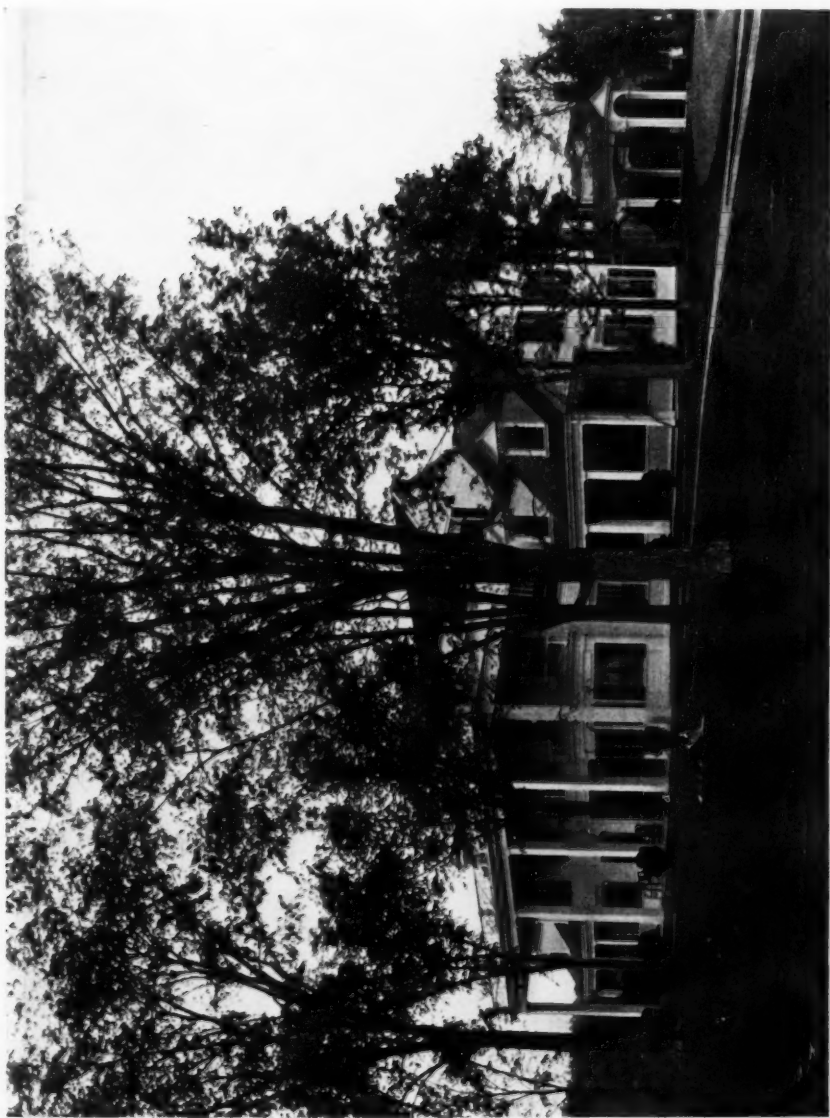


A CHARMING COLONIAL HOUSE ENHANCED BY AN APPROPRIATE SETTING.

Mr. Alfred A. Pope's House.

McKim, Mead & White, Architects.

Farmington, Conn.

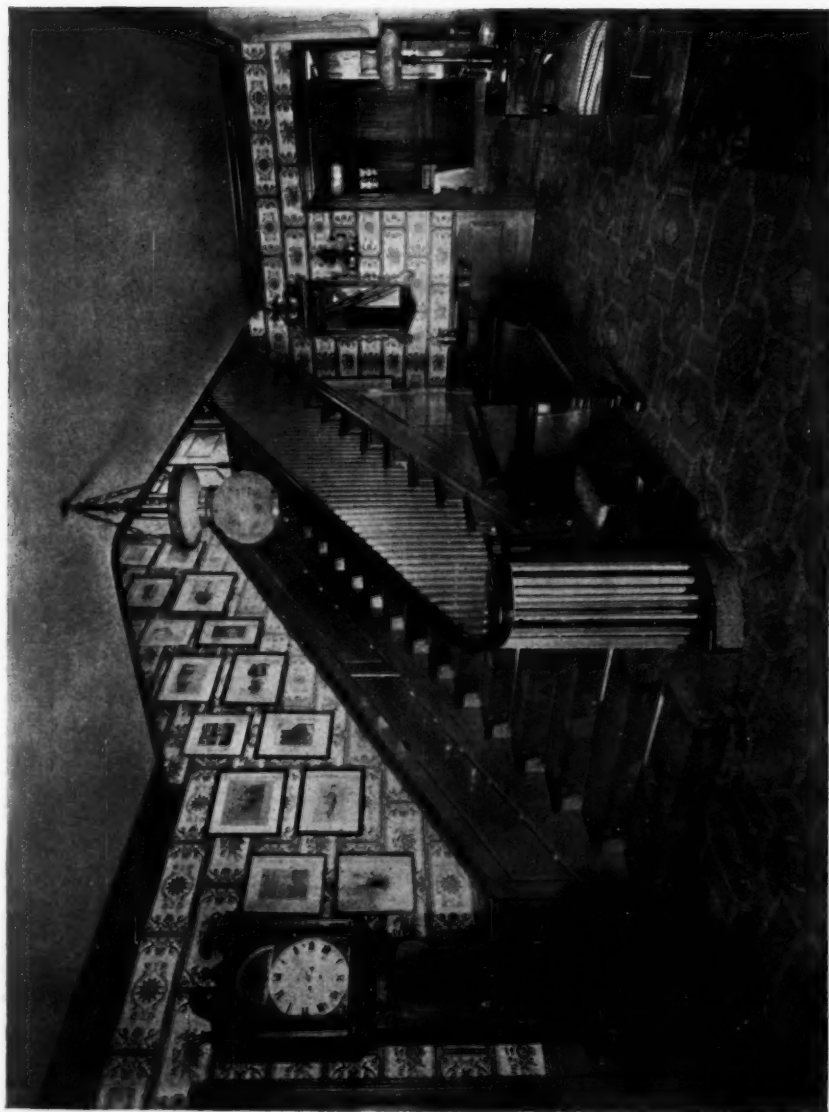


FROM THE SIDE, THIS HOUSE PRESENTS A MORE ANIMATED APPEARANCE AND GIVES THE SPECTATOR
A BETTER IDEA OF ITS SIZE.

Mr. Alfred A. Pope's House. McKim, Mead & White, Architects.
Farmington, Conn.



A GOOD VIEW FROM THE PERGOLA INTO AN ATTRACTIVE FORMAL GARDEN.
Farmington, Conn. Mr. Alfred A. Pope's House. McKim, Mead & White, Architects.



THE ENTRANCE HALL IS ALMOST SEVERELY PLAIN BUT VERY TASTEFULLY FURNISHED.
Mr. Alfred A. Pope's House.
McKim, Mead & White, Architects.
Farmington, Conn.



THE DRAWING ROOM.—HERE AGAIN THE FURNISHINGS HARMONIZE WELL WITH THE
ARCHITECTURAL TREATMENT.

Farmington, Conn.

Mr. Alfred A. Pope's House.

McKim, Mead & White, Architects.



THE SECOND STORY HALL SERVES WELL AS AN ART GALLERY.



THIS VIEW GIVES AN IDEA OF THE EXTENT OF THE HOUSE; THE CAMERA HAS PERHAPS EXAGGERATED THE SCALE A BIT, BUT THE FURNITURE SERVES TO CORRECT THIS DEFECT.

Farmington, Conn.

Mr. Alfred A. Pope's House.

McKim, Mead & White, Architects.



AN INTERESTING LIBRARY.



THE COLONIAL IDEA OF EXTREME RESTFULNESS OF TREATMENT HAS HERE BEEN
 ADMIRABLY CARRIED OUT, EVEN IN THE FURNITURE.
 Farmington, Conn. Mr. Alfred A. Pope's House. McKim, Mead & White, Architects.



THE DINING ROOM IS INVITING AND SPACIOUS.

Mr. Alfred A. Pope's House.

McKim, Mead & White, Architects.

Farmington, Conn.

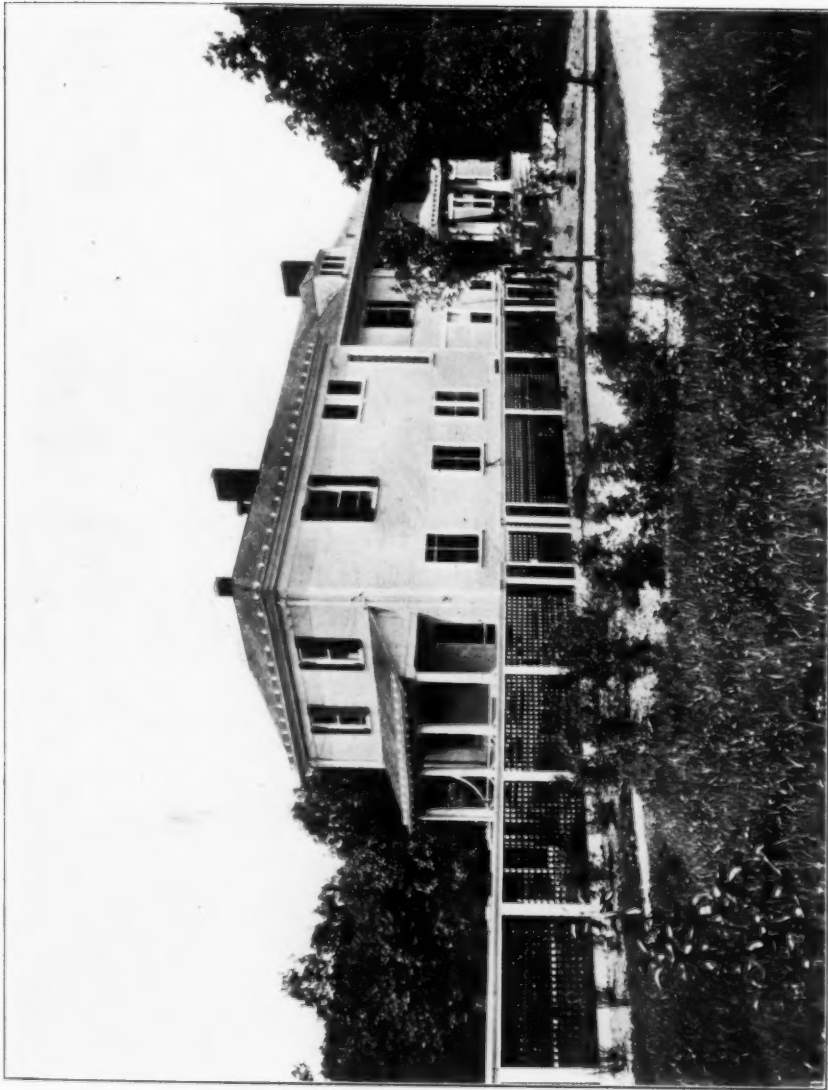


IN THIS HOUSE THE ARCHITECT HAS SECURED DIGNITY BY ADDING AN EFFECTIVE BUT NOT VERY
UTILITARIAN FEATURE ON COLOSSAL COLUMNS.

Lake Forest, Ill.

MR. H. S. ROBBINS' HOUSE.

JAMES G. ROGERS, ARCHITECT.



THE KITCHEN AND SERVICE WING OF THE HOUSE.
Mr. H. S. Robbins' House.

James G. Rogers, Architect.

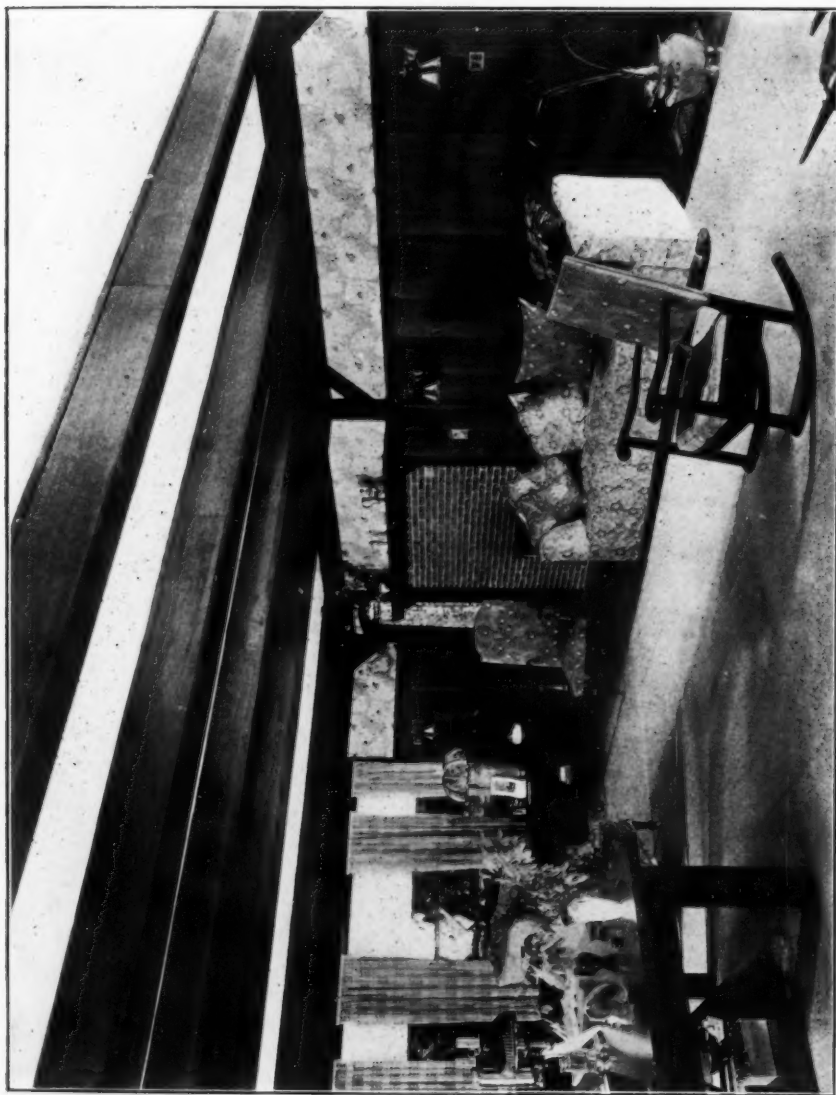
Lake Forest, Ill.



A NEARER VIEW OF THE ENTRANCE PORTICO.
Mr. H. S. Robbins' House.

Lake Forest, Ill.

James G. Rogers, Architect.

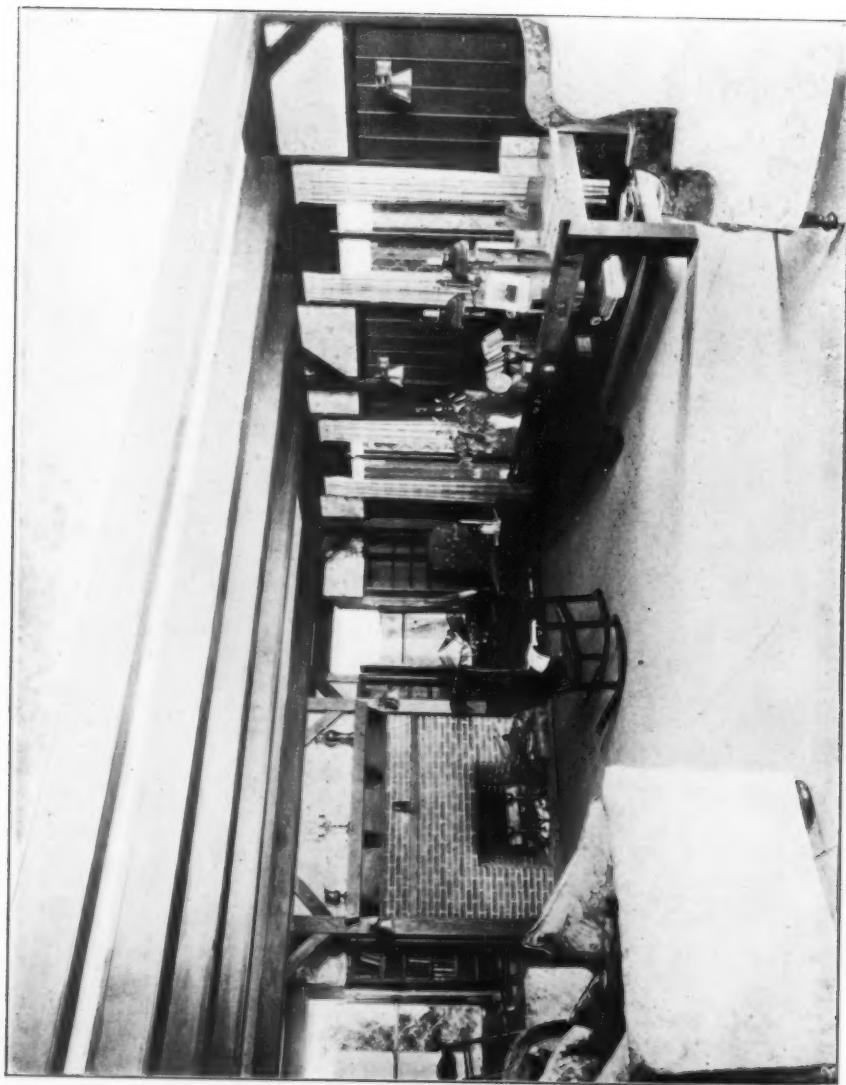


THE LIVING ROOM.—A VIGOROUS TREATMENT IN WHICH CONSTRUCTION AND MATERIAL ARE
FRANKLY ACKNOWLEDGED.

Lake Forest, Ill.

Mr. H. S. Robbins' House.

James G. Rogers, Architect.



Lake Forest, Ill.

ANOTHER VIEW OF THE LIVING ROOM.
Mr. H. S. Robbins' House.

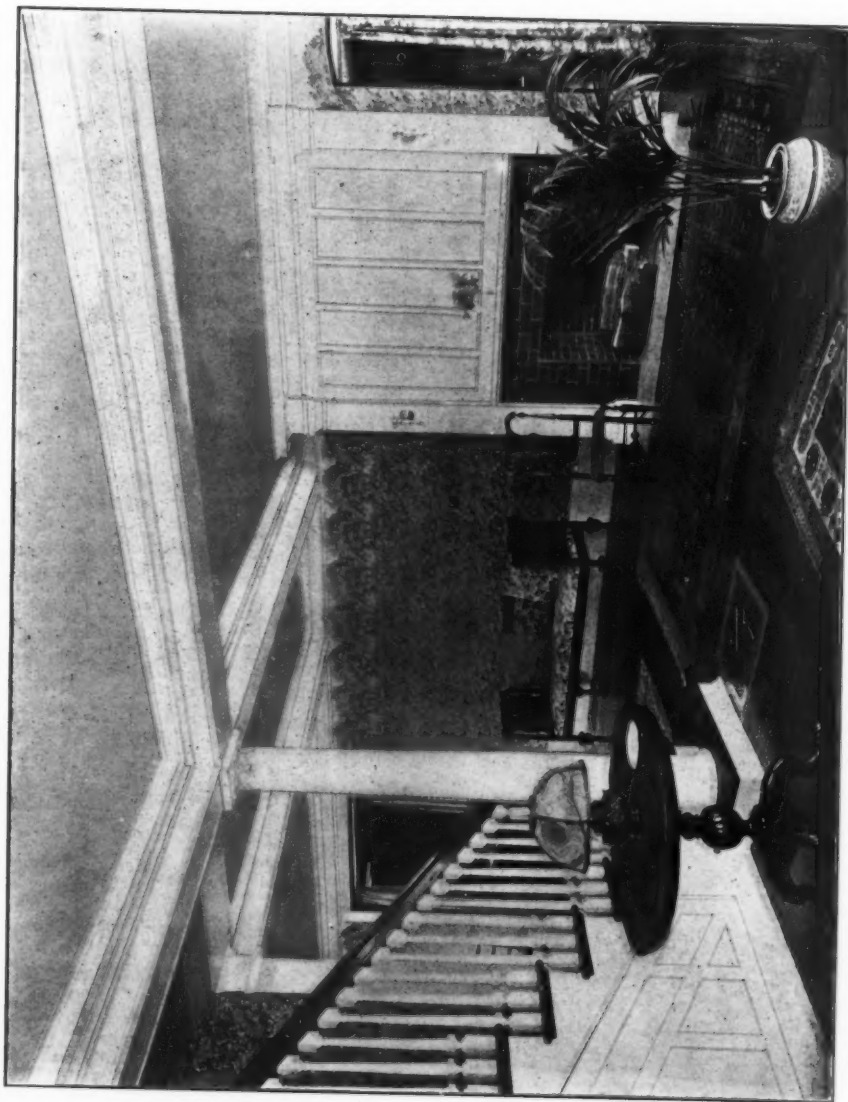
James G. Rogers, Architect.



THE DINING ROOM, MR. H. S. ROBBINS' HOUSE.

James G. Rogers, Architect.

Lake Forest, Ill.



Lake Forest, Ill.

THE HALL IN MR. H. S. ROBBINS' HOUSE.

James G. Rogers, Architect.

✓ Ornamental Metal Work and Wire Glass

During the past five or six years, but especially within the last year, since the Baltimore conflagration, a rational and highly necessary transition has been steadily going forward in the matter of developing inefficient and unsatisfactory details of fire-resisting construction into efficient means of fire prevention or resistance, and in rendering such details not only adequate under fire test, but transforming hitherto unsightly and crude appearing elements of design or construction into features capable of an attractive or even a highly architectural treatment.

This transition has been progressing ever since the modern type of so-called fireproof building became an established fact, for as in all other developments of constructive art, there came first the creation of an original idea, then improvement and perfection of detail, and later the attempt to co-relate successful construction with artistic effect.

Especial progress has been made since the great Baltimore fire, and the experience gained in that catastrophe has served as a wonderful educator to investors, insurance interests, and those entrusted with building design and construction, and has been a powerful object lesson to the manufacturer of building materials and devices. That the prudent and far-seeing investor or the progressive architect has demanded something better than the old order of things, and that this demand has been met by ingenuity and improvement, successful from the standpoints of efficiency and appearance alike, there can be little doubt on the part of those who closely follow the better class of building operations.

One great reason for the marked improvement in many fire-resisting details of design is that the architect is realizing the fact that efficiency under fire test and ugliness need not necessarily be synonymous. The civil engineer, dealing with bridges, railroad work, dams, and other large problems of natural

forces, and even the architectural engineer engaged in the design of steel skeleton buildings and foundation work, is proverbial for his lack of appreciation of architectural beauty, at least in so far as exhibited in any of his handiwork; while on the other hand, the architect has generally established a reputation among engineers or fire preventive specialists for caring only, or principally, for decorative design regardless of efficiency in many instances, and with lack of enthusiasm, to say the least, over many general features or details of design which might be of great practical value from a constructive or fire-resisting viewpoint, but which could seemingly be attained only with detraction from the conventional or desired artistic results.

And this view of the architect is only natural, in a way, especially when the problem of a thoroughly fireproof building is presented; for we are very apt to picture such a structure in the mind's eye as a massive, uninteresting and in-artistic pile of brick, terra-cotta or concrete, with solid masonry partition walls, tin or metal covered doors and window shutters—in short, a structure wherein all thoughts of beauty or architectural expression have had to be subordinated to considerations of purely structural and practical value.

But such is not the case, at least in any such extreme sense. The ingenuity of the architect, coupled with the endeavors of progressive contractors and manufacturers, has succeeded in solving, at least in part, the problem of making many details of fire-resisting design attractive and ornamental as well as efficient; and it is to the invention and application of wire glass that many of these improvements are principally due.

The first marked attention paid to the possibilities of wire glass construction was the direct result of the Baltimore fire. This conflagration amply justified the *raison d'être* of fireproof building construction, or fire-resisting construction more properly speaking, in its

essential features at least; but many vital individual points or details in such construction were found either wanting entirely or sadly lacking in adequate efficiency. Among such defects, or attributes to the basic principles of fire-resisting construction, *i. e.*, the employment of fire-resisting materials for the essential structural members, no feature of ordinary building convention received

instances in which wire glass in metal frames and sash had been found, even in the heart of the conflagration, to be most effective. These most severe tests of this material by tremendous heat, and their fulfilment of all that could reasonably be asked, directed renewed interest to the possibilities of wire glass as an effective fire-stop which might, at the same time, not only be unobjectionable

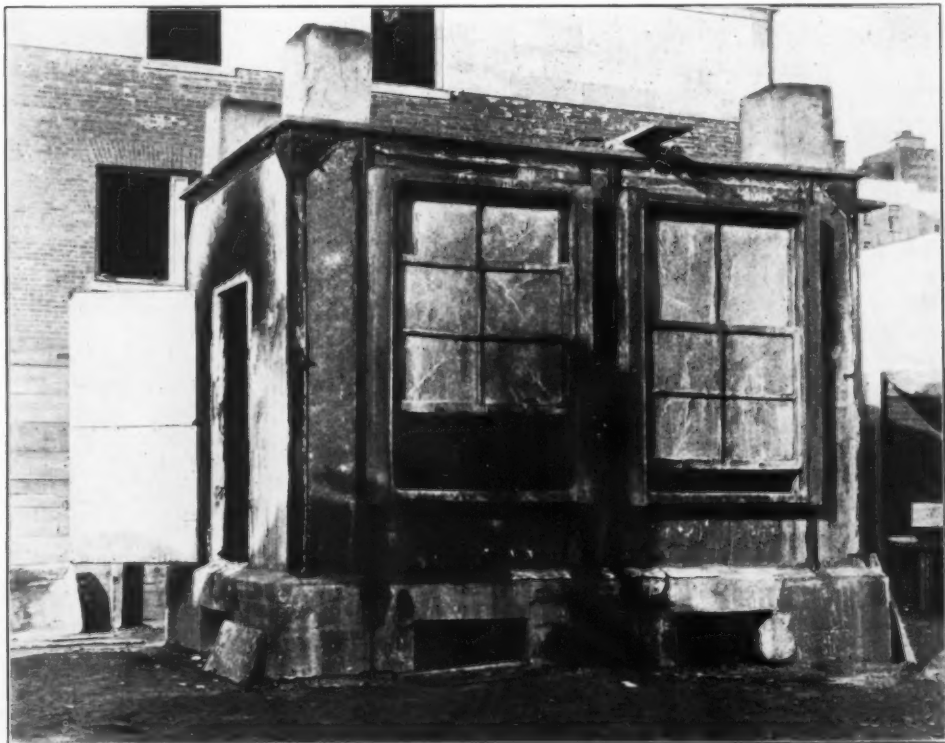


FIG. 1. THE FIRE TEST HOUSE AT COLUMBIA UNIVERSITY, SHOWING THE RESULT OF A FIRE TEST ON WIRE GLASS.

such criticism, and deservedly, as the unprotected window areas—unprotected as regards external fire hazard from adjacent or neighboring property, and unprotected in the sense of failing to isolate one story from another in the same structure. It is not necessary to review here the experiences of this conflagration at length, but as the prevalent type of tin shutter was found totally inadequate, much prominence was naturally directed to those few but significant

as to appearance, but susceptible of architectural treatment in combination with wrought- or cast-iron or bronze.

To illustrate the high fire-resisting qualities of wire glass, Fig. 1 shows the exterior of one of the test-houses at the fire testing station of Columbia University in New York City, where, on April 8, 1905, Professor Ira H. Woolson of that university made a test of a patented fireproof composition material, in combination with wire glass. This illustration

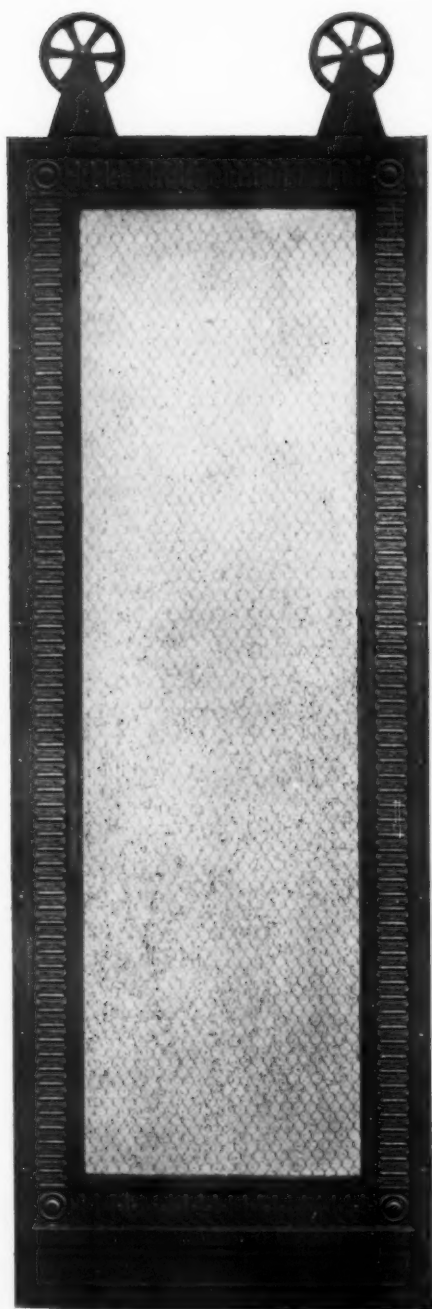


Fig. 2. Iron and Wire Glass Elevator Door,
Kean, Van Cortlandt Building,
New York, N. Y.

Warren & Wetmore, Architects.

shows the condition of the glass after "a continuous fire against the material for one hour, bringing the heat gradually up to 1,700 degrees Fahr. during the first half hour, and maintaining an average of 1,700 degrees during the last half of the test. Then a $1\frac{1}{4}$ -inch stream of cold water was thrown against the material for $2\frac{1}{2}$ minutes, at hydrant pressure, which at this location varies from 25 to 30 pounds.

Immediately after the fire started the glass began to crack in all directions, but the wire held it from falling out. The radiation of heat through the windows was intense, but they proved an effective fire stop. The condition of the glass after the fire, however, is better shown in the illustration than in words. Suffice it to say, the panes were intact after the test, save for one small piece at the bottom of one sash which was accidentally knocked out by the throwing in of a log of fuel wood. The innumerable small pieces into which the glass cracked as a result of the early stages of the fire were prevented from separating by the embedded wire, until the later more intense heat practically fused them together again into entire panes.

Here, then, is to be found the substitute for the heretofore necessary but objectionable iron or tin-covered shutter, a well known substitute by this time, but one which seems not to have developed in proportion to the possibilities opened up. Wire glass windows are no longer an innovation, but their use has so far been almost exclusively confined to warehouse or factory buildings, side and rear walls and the like, where appearance is not considered of paramount importance. In these cases the glass is placed in sash and frames of copper or sheet-metal, or sheet-metal covered wood, or, rarely, in cast-iron sash and frames. The details have usually been of the plainest character, looking to efficiency in exposed locations, rather than to effectiveness in appearance.

But if the protection of window areas against external fire exposure is necessary, and if wire glass will accomplish

*From report by Prof. Woolson to the Superintendent of Buildings in New York.

this protection when placed in suitable fire-resisting frames and sash—both of which premises must be admitted—why, then, should not some attempt be made to solve this problem in a rational and architectural manner? There is still but a single example and this a very recent



Fig. 3. Bronze and Wire Glass Elevator Doors on the First Story of the Trinity Building, 111 Broadway, New York.

Francis H. Kimball, Architect.

one, of an entire important fire-resisting building devoted to offices in which wire glass was used for the windows throughout, namely the 12-story Commercial Realty building, Norfolk, Va., Messrs. Parker & Thomas, architects. The sash and frames of all windows throughout this building are of sheet-metal over

wood, with plate wire glass in all lights.

In marked contrast to this lack of development in the window problem has been the great advance made in the past year or two in the construction of elevator enclosures. Here, too, the necessity for some architectural treatment of a light-transmitting but fire-resisting partition has long been apparent. Both common sense and past experience show the folly of running open light shafts, stairwells, or elevator shafts through successive stories of otherwise fireproof buildings *unless surrounded by fireproof partitions*, but here, until the advent of wire glass, the architect was either at variance with his client over relegating stairways and elevators to isolated protected enclosures of brick, terra-cotta or plaster, for the sake of safety in spite of appearance, or at variance with himself, in the fear that departure from the conventional treatment of such features as stairways, elevator grilles, etc., would rob an otherwise barren interior of needed architectural effect.

But as soon as the possibilities of plate wire glass became apparent, the solution of the elevator enclosure was rapidly accomplished. Here were the means of preserving the conventional grille-like appearance, treated as plainly or elaborately as circumstances required, and at the same time providing an adequate fire-resisting enclosure which would be both non-obstructing to the view of the car operator in taking on or letting off passengers; an important consideration under our rapid methods of operating elevator cars.

All of the different types of wire glass have been employed for this purpose, rough, ribbed, maze and polished-plate wire glass, but the latter variety is now generally employed on passenger elevator fronts. Fig. 2 shows a single elevator front door, of iron framework, with a single light of polished plate wire glass. Fig. 3 shows the solid bronze elevator doors in the first story of the new Trinity Building, New York (arranged to slide either way from the center), where small upper panels only are provided with wire glass; while Fig. 4 shows the elevator fronts in the second

to twenty-third stories in the same building.

Fig. 5, at the end of this article, shows the elevator enclosure in the first story of the Rector Building, Chicago, where plate glass was used in the doors, and plate wire glass in the transom panels. This latter photograph shows very strikingly the slight difference in trans-

om car. One panel of each front is stationary, behind which the other two doors slide, one door travelling twice as far and twice as fast as the other door, so that they are both fully open at the same instant. These photographs show the manner in which the architects designed the stairwell, adjoining the elevator shafts, treating it, as far as

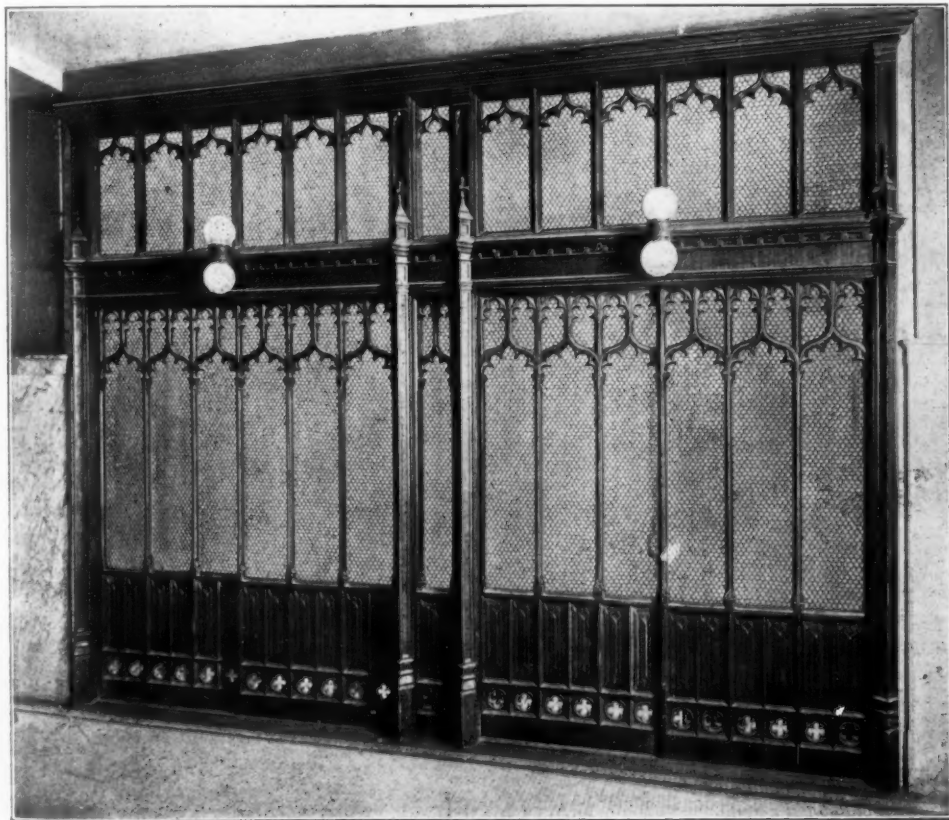


FIG. 4. TYPICAL ELEVATOR ENCLOSURE, 2D TO 23D STORIES, TRINITY BUILDING, 111 Broadway, New York.

Francis H. Kimball, Architect.

parency between ordinary plate glass and plate wire glass.

Fig. 6 illustrates the first floor of the new Chandler Store Building, Boston. These fronts are built of cast and wrought iron, with plate wire glass panels, the doors being of the three-fold patented type, so arranged by means of lever latches as to permit a two-thirds available opening in front of each eleva-

tor car. The appearance from the store side is concerned, exactly like another elevator front. The door to the stairway opening is made in one entire section, running on a track and ledge within the stairwell. A fusible link connects an overhead chain with counterbalanced weights, so that the parting of the link under any high temperature would cause the automatic closing of the door. Thus



FIG. 6. - A MORE ELABORATE METAL DECORATION WITH LESS GLASS SURFACE THAN FIG. 5.
CHANDLER STORE BUILDING.

Boston, Mass.

Peabody & Stearns, Architects.



FIG. 7. A WELL-HUNG MARQUISE OF IRON AND WIRE GLASS. THE RECTOR BUILDING.
Chicago, Ill. The Winslow Bros. Co., Manufacturers.

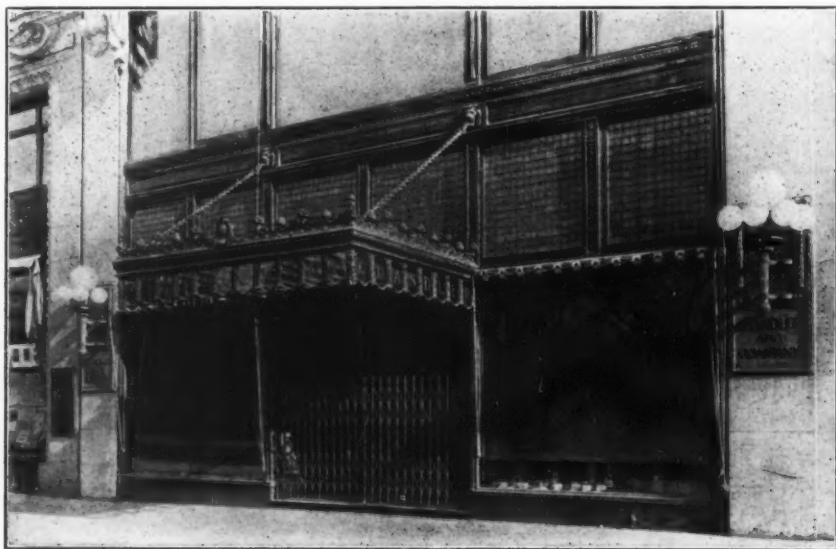


FIG. 8. A RICHER BUT LESS SUCCESSFUL MARQUISE: THE CHANDLER STORE BUILDING.
Boston, Mass. Peabody & Stearns, Architects.



FIG. 9. A TYPICAL KIOSK OF THE INTERBOROUGH RAPID TRANSIT RAILROAD (SUBWAY).
City Hall, N. Y. Helms & La Farge, Architects.

the stairwell is open and accessible under normal conditions, but completely isolated in time of fire.

These several examples serve to show how intelligently and how well the architect and the iron-worker have adapted old forms and precedents to new conditions, and, even aside from the far

The combined use of wire glass and iron or bronze has not been confined to elevator fronts and windows alone, although it is chiefly in these details of building construction that innovations have been made. Stairway enclosures, partitions and marquises are now largely designed of an iron or bronze frame-

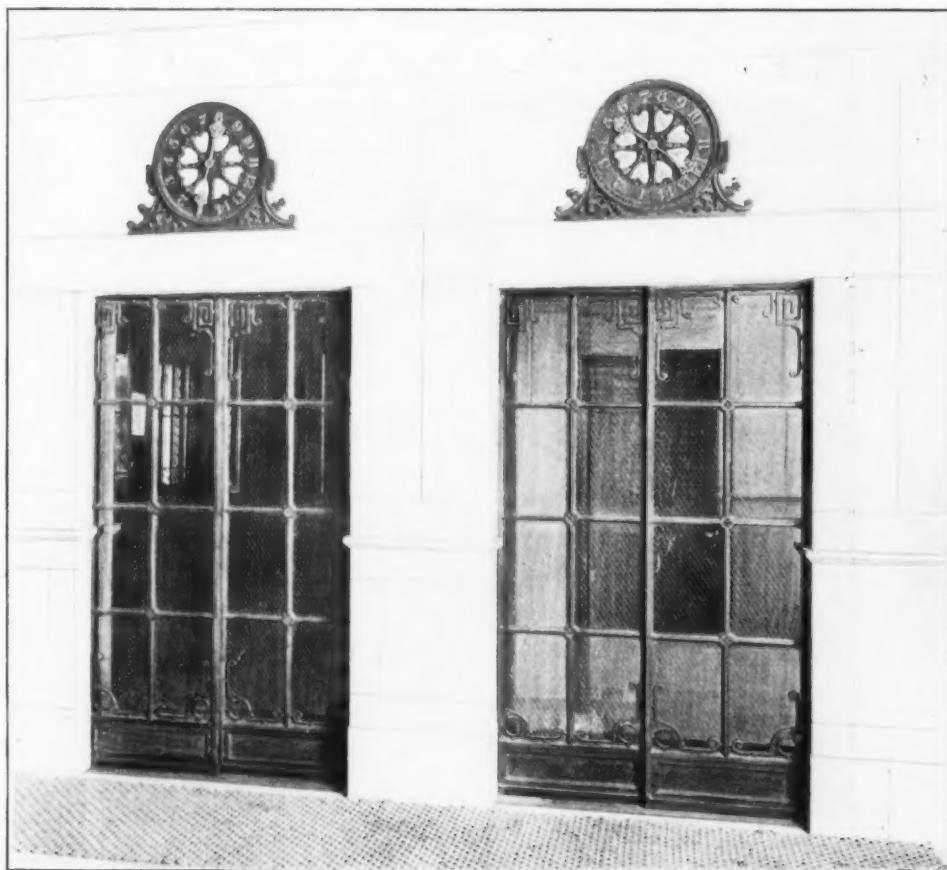


FIG. 5. A FRANK BUT DECORATIVE TREATMENT OF AN IRON AND WIRE GLASS ELEVATOR ENCLOSURE. THE RECTOR BUILDING.

Chicago, Ill.

The Winslow Bros. Co., Manufacturers.

greater practical efficiency of such wire glass enclosures, it cannot be said that the transition has resulted in any lessening of architectural treatment or effect. Quite the contrary, in many examples, at least, as witness the most pleasing, architectural, and at the same time practical treatment accorded the elevator fronts in the Trinity Building.

work, filled in with plate, maze or rough wire glass. Figs. 7 and 8 show respectively the marquises of Rectors in Chicago, and the Chandler Store Building in Boston. Fig. 9 shows one of the many iron and wire glass kiosks of the new rapid transit subway in New York City, the lights being of the rough or hammered wire glass.

J. K. Freitag.



FIG. 1. ANCIENT PERSIAN GLAZED TILES FORMING A MOSAIC PICTURE, WITH PAINTED FIGURES OF MEN AND WOMEN AMONG TREES AND FLOWERS.
(Reproduced through the courtesy of the Metropolitan Museum of Art, New York.)

NOTES & COMMENTS

SOME FORMS OF PERSIAN ART

The highest expression of Persian art is associated with its architecture. The keynote which it ever sounded was "utility through decoration," and while some may regard art of this character as of secondary importance as compared with that which is independent of alliance with industrial aims, the fact remains that no race was ever more thoroughly imbued with the artistic sense than the Persian, and it is surely most creditable that the artists of that nation were able to turn their talents to practical account. Nor was this power ephemeral, for the Persian artist has gone on century after century working hand in hand with the architect and the builder. Proof of this is seen everywhere, and particularly in the extremely beautiful designs reproduced in the windows of Persian houses.

The Persian artist seems to have always had an innate faculty of adapting himself to surrounding conditions. In the southern provinces, where stone and marble are largely used in the construction of houses, these materials are naturally employed as the agencies for the expression of art ideas. On the other hand, in the Caspian region, where wood is the chief building material, the piazzas, mullions and casements are gorgeously decorated with designs to which that material best lends itself, but in a manner strictly in harmony with Persian concepts. Even in the most humble dwellings, a broad window with a beautifully decorated casement is no uncommon sight. In the capital city, Teheran, the materials commonly used for house building are sun-burned—or sometimes kiln-dried—bricks, and mud toughened with straw—"cargêl," but even under rather uninviting conditions one can see ample proof of the Persian genius for decoration; and, indeed, by the use of plaster of Paris these mud houses are often converted into really beautiful works of art.

But it is not only in connection with architecture that the exposition of Persian art prevails. It is seen, too, in the decorated pottery, especially in that kind known

as "Kashee," which was first introduced into Persia by Chinese artisans. This ware is an admirable faïence, either polychromatic, or of prevailing black or blue-black tints, produced by Chinese artisans who knew how to give it lightness of touch and a few suggestive strokes characteristic of blue chinaware, interwoven with quaint bits of landscape and lovely floral patterns, in a conventional but thoroughly decorative style. Later, when the Persians had developed a ceramic art of their own, the designs of the Chinese workmen were modified by native ideas, resulting in a ware entirely distinct and national. One of the chief differences between these two wares is that while the Persian pottery is lighter and can be scraped or cut with sharp steel, the Chinese blue ware is as hard as flint. White porcelain of a translucent milky tint was also made in Persia in the early days. The glaze is hard and pearl-like. Examples of this ware are now very seldom seen.

In general, Persian faïence is characterized by an azure blue or golden yellow ground, generally covered with figures, birds, foliage and other ornaments traced in white. The wares of Persia, Rhodes and Asia Minor, which somewhat resemble porcelain, are similar in character, and there is no sure criterion by which to distinguish them. The color and ornamentation are very brilliant and of great beauty.

Excellent examples of the early ceramic art of Persia have been found in the lowest of the three buried and superimposed palaces at Susa, the ancient Shushân, in southwestern Persia. Among them are a number of glazed tiles in polychromatic designs which are unique in manufacture and stand out prominently among the most striking art objects of the world. The manufacture of these enamelled tiles dates from the tenth century. The walls of the ruined mosque at Sultaneat were cased with them. They were deep blue in color with yellow and white scrolls and devices, and were generally made in arabesque patterns, sometimes mingled with flowers and animals, which latter characteristic distinguished them from Arabic patterns.

At Susa, too, have been discovered examples of a form of ceramic painting bor-



FIG. 2. THIS TILE SHOWS THE FIGURES TO BETTER ADVANTAGE IN THAT THE CONTRAST BETWEEN THE FIGURES AND THE FRAME OF THE COMPOSITION IS SHARPER THAN IN FIG. 1.
(Reproduced through the courtesy of the Metropolitan Museum of Art, New York.)



FIG. 3. WHILE FIGS. 1 AND 2 ARE PORTIONS OF A RUNNING ORNAMENT, THIS EXAMPLE SHOWS A COMPLETE PATTERN.

(Reproduced through the courtesy of the Metropolitan Museum of Art, New York.)

rowed from Chaldea, and including such objects as a painted lion, and a procession of figures representing the "Immortals." This art has been perpetuated, and as late as the reign of Shah Abbass (1600-1630), pictorial plaques were made which rival the ceramic designs of Susa that were executed two thousand years earlier.

These glazed tiles, of which mention has been made, were decorated with an endless variety of design, and were used for in-crusting floors and walls, especially in and around Teheran, where the absence of a marble suitable for the purpose afforded an opportunity to push the manufacture of tiles into extraordinary prominence. The interior of Persian baths is often completely covered with such tiles, as well as the outer surface of the domes of mosques, minarets, city gates, etc. An American writer, speaking of this old Persian tile-work, which is

far more beautiful than the more modern product, believes that the special influences which have exerted a powerful effect in directing the art-progress of Persia, were the conversion of the country to Mohammedanism; the consolidation of the legends of Persia into a popular form, thus reviving interest in art and stimulating the fancy of the people at a time when the arts were entering on a new phase of expression; the induction into power of the Sefavean dynasty; and the importation of Chinese and Indian artisans into Persia.

Tile-making had two distinct periods. The most interesting kind of tile produced was called "reflèt," on account of its marvellously iridescent glaze. "The entire surface," writes a connoisseur, "gleams with a massive polish or glaze which, in a broad, front light, gives the effect of polished marble, while a glancing side light reveals mysteri-

ous opalescent flashes." The secret of compounding those intense blues and this wonderful glaze seems to have become one of the lost arts of Persia, although there is a tradition that gold entered into its composition.

The art of making iridescent glazes is believed to have been invented in Persia before the Mohammedan conquest, and it is probable that the city of Rheï (or Rhages),



A Modern Imitation of an Ancient Persian Tile, Showing the Re-discovered Iridescent Glaze.

which was destroyed some six hundred years ago, and was a large city long before the Christian era began, was one of the most important centres for the manufacture of these "reflêt" tiles. After the conquest by the Arabs, the making of iridescent ware was still further developed until it became one of the most widely practiced arts in Persia. Some of these tiles, now in the museum at Sèvres, France, are about nine inches square and most brilliant in color.

They are of a blue pattern on a white ground, smaller oblong tiles forming the border. The tiles were not always made of the same length, for some have been found measuring eight feet each in length.

The glazes were of different kinds, each one iridescent "like the mystic spark of the opal, or the shifting splendor of the dying dolphin," and yet each having a chromatic tone entirely its own. The secret of preparing these lustres, which was known to the master workmen of Natanz, Kashân, Rheï, Nain, and other cities, seems to have been lost in Persia about two centuries ago, but it is said that near Guadalajara, Mexico, there are some potters who know the secret, which, they claim, their ancestors learned in Spain from Persian artisans employed by the Moors; and it is also a fact that Messrs. Edward and William Lycett, of Atlanta, Ga., who have during the last twenty years been studying the Persian reflêts, have produced a glaze which they assert to be an exact duplication of the ancient "Murrhine."



Carved Representation of a Fish in Tile, Covered with an Iridescent Glaze; Believed to be a Faithful Reproduction of the Ancient "Murrhine."

A specimen of this ware, which is now in the National Museum, is here reproduced. The Romans, too, as early as in the days of the Caesars, knew of this wonderful ware, and paid enormous prices for vases made of it. Pliny speaks in glowing terms of its iridescent glaze, but the secret of its manufacture has not been divulged, excepting so far as the Lycetts may be said to have rediscovered it. All that is actually known of its earliest origin is that it was first brought to Rome by Pompey, and it has variously been supposed to be Chinese jade, porcelain, fluor-spar, iridescent glass, etc. Another belief is that it had a talc or soapstone body, covered with iridescent glaze.

During the reign of Shah Abbas (1600-1630), various forms of art were revived, and several of the cities became prominent for the production of special objects displaying a high order of skill and æsthetic talent. The manufacture of reflêt pottery again became prominent in his reign, and continued

to flourish up to the time of the disastrous invasion of Mahmood, the Afghan.

In the later days of the Sefavean monarchs the sacred tombs were redecorated with a species of "reflèt" tile, resembling the iridescent ones of earlier times, but generally more fanciful in shape and with a greater variety of tints. Under their rule, too, the walls of palaces and pavilions were incrustated with pictured tiles of two classes: the first, mosaic in pattern and of wonderfully vivid colors, including a deep lapis-lazuli blue, which cannot be reproduced even in Persia at the present time. Tiles of the second class were emblazoned with fanciful grotesque designs in relief.

So admirable an impression has Persian ware produced at all time that English pottery-makers introduced what they called "Persian ware" only a little more than twenty years ago, in which decoration was freely applied. It is modeled in low relief with a semi-transparent glaze which appears darker in color where it is thickest, as in the hollows, and lighter on the projections.

R. L. GEARE.

TOWN IMPROVE- MENT

A pamphlet report issued by the Mattapoisett Improvement Association is of interest as a model of what a village improvement association's report ought to be. It is well printed on good paper; it has an attractive but fittingly simple cover. The text includes an introduction that in a dozen lines gives the story of the society's beginning, and in half a dozen more makes acknowledgments where these are due. Then come the by-laws. A half-tone of a Mattapoisett scene follows, as introductory to the address of the President—a model in itself, and only twenty-seven lines long! The reports of Secretary and Treasurer are businesslike and equally brief. The short reports of the committees follow. There are committees on rubbish, on street watering, on trees, paths, bridges, fences and grounds, on historic interests and cemeteries, on gardens and seeds, and on entertainment—the latter having the task of raising the something like five hundred dollars annually needed for the society's various activities above the sum furnished by membership dues. At the end of the volume are the committee and membership lists. Mattapoisett, which is on Buzzard's Bay, is fortunate in having a summer colony of well-to-do people; but nowadays most towns have that. And

the improvement society is not made up of the summer colonists, nor is its work done by them. They have a representative among its officers, and it may be that some of them constitute the dynamo of the society—but if they do, they are at once tactful and modest, for it nowhere appears in the report. In fact, there is evidenced that harmonious working together for the common good which should be attainable in any such village, and the result should be an encouragement to every reader of this note to begin a like work in the village to which he goes in summer. Townspeople and summer colonists have the same interests in improvement work, and if the summer people, who can journey to fame by so many bigger ways, would be content to work on perfect equality with the villagers, and even see with equanimity some of the glory that really ought to be theirs fall upon those emptier and broader shoulders, so much might be accomplished! One can guess that such is the secret of the success in Mattapoisett.

IMPROVE- MENT OF COLUMBIA, S. C.

The report on the Improvement of Columbia, capital city of South Carolina, is exhaustive. It is amply illustrated with photographs and diagrams, and is very long. As Columbia is a small town—belonging to a class that as yet rarely feels able to indulge in the luxury of expert advice—the report has the added value of suggestiveness to other cities of like size. And there always is a good deal that one town can learn from another. In their preface, the authors urge the appointment of a "Joint Improvement Commission," to be created by city and State, "with full power to adopt and carry out a systematic, well-conceived scheme of improvement that would not be subject to the passing whims or fancies of even well-intentioned individuals who might be in temporary municipal or State authority." It would be a great thing if every city and town that has secured this sort of a report could have such a commission. The scope of the report is indicated by the following subheads: A civic centre, the topography and landscape as related to improvements, streets and street trees, overhead wires, city blocks and a park system. As the authors say, a plan of this sort should consider the tendencies of growth and the physical features that are likely to influence this growth, the needs of

the community as indicated by present and probable business and social requirements, and the traditions and character of the residents. It is plain that, if reports be properly based on these conditions, the problems of no two cities can be exactly alike.

PAMPHLET REPORTS

The pamphlet literature is made up mainly of park reports, of which few are generally helpful; of reports of associations and societies, of which a considerable number are suggestive, interesting, and amazing as records of the movement's progress; and finally improvement plans for specific communities. The latter is a recent development; but it already includes much, both of fact and of theory, that is exceedingly valuable. Such reports are those of the Washington Commission, of the Cleveland and St. Louis group plan commissions; of the Olmsteds on park systems for Portland and Baltimore, and on the improvement of Detroit; of Mr. Robinson for the cities of Detroit, Colorado Springs, Denver, Honolulu, and Oakland; and now an admirable report has been issued by Kelsey & Guild, of Boston, on the improvement of Columbia, S. C. The latter is in pamphlet form, but to some of the others there has been given the dignity of board covers.

BOSTON BILL BOARDS

A very interesting and lively bill board discussion has lately been in progress in Boston. It raged around the sacred Common, the tranquil beauty of which had been disturbed by huge signs on buildings near its margin. All the newspapers joined in the crusade; men like C. Howard Walker, Edward R. Warren, and F. A. Whiting took the leadership; thousands of return postal cards were sent out, the responses showing a civic spirit awakened to protest; and the Twentieth Century Club itself devoted a luncheon to the subject. Presently the board on the Hotel Pelham was removed and the Gillette Safety Razor Co., which maintained it, wrote, "We are impressed by the agitation and civic attention

manifested, . . . and desire to assure you of our cooperation in preserving the architectural grace and pleasant views in and about Boston Common." Other successes then followed. The event has an added significance through the circumstance that a few weeks earlier the Supreme Court of the State had declared unreasonable, and therefore illegal, the rules of the Metropolitan Park Commission prohibiting the erection of large signs within a hundred feet of a park. The voice of the people, however, proved mightier than the law.

TUITION IN ARCHI- TECTURAL DRAWING

Eli Benedict, an architect, at 1947 Broadway (65th St.), New York, announces that he has opened an office class in Architectural Drawing during the summer at the above address. The work is intended to help the younger draftsmen and other beginners in the study of architecture, and continues the plan followed during the winter in the Course in Architecture Drawing at the 23d St. Branch of the Y. M. C. A. The sessions are held on Monday and Thursday evenings at eight o'clock, and on Saturday afternoons at one o'clock.

By way of explanation, we would say that Mr. Benedict is a graduate of the School of Architecture, Columbia University, Class of 1899, and a member of the League of American Architects; he has been in active practice for the past three years and is desirous of supplementing his activities by helping young men who are trying to improve themselves in conjunction with their office work. To this end he solicits correspondence or interview.

CARNEGIE LIBRARY GIFT FOR ARKANSAS CITY, KANSAS

Mr. N. D. Sanders, cashier of the Citizens' State Bank of Kansas, writes us under date of July 6, 1906, that Mr. Carnegie has given Arkansas City, Kansas, \$16,000 toward the establishment of a Public Library. A building committee has already taken the matter in hand, and invites competitive designs from architects.